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Lake Crescent Management Plan

Final Environmental

Impact Statement

September 1998

**National Park Service
Olympic National Park
Washington**

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**Final
Lake Crescent Management Plan
Environmental Impact Statement**

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**Final
Lake Crescent Management Plan
Environmental Impact Statement**

**OLYMPIC NATIONAL PARK
Washington
September 1998**

This *Final Lake Crescent Management Plan* provides guidance for the development and use of the Lake Crescent area of Olympic National Park for the next 15 to 20 years. For the past several years, visitor use at Lake Crescent has increased steadily. The lake itself is used for many forms of water recreation. A long-range management plan is needed to effectively guide future management decisions concerning resource protection and visitor use of this highly scenic and popular area.

The *Final Lake Crescent Management Plan* contains five alternative strategies for management of the Lake Crescent area. The alternatives differ in extent and location of visitor facilities, and corresponding impacts on natural and cultural resources, park operations, and visitor use and experience. The range of alternatives includes the four alternatives presented in the draft plan, with modifications based on public comment received, additional issues raised, and further impact analysis. A fifth alternative, submitted during the public comment period, has been added since publication of the draft plan.

While the plan provides specific direction for future management decisions regarding resource protection and public use at Lake Crescent, it does not contain detailed site designs. Over the next several years as funding allows, individual site plans for specific areas around the lake would be completed based upon the recommendations in this plan. These site plans will address various aspects of site development including the location of roads, buildings and facilities, vehicle and pedestrian circulation, recreational facilities, and the protection of natural and cultural resources.

Alternative A, identified as the NPS Proposed Action, best satisfies the park and NPS mission, as well as the park's management objectives and long-term vision for Lake Crescent. It recognizes both the need to protect natural and cultural resources and to provide appropriate recreational opportunities for visitors. Alternative B (the no-action alternative) represents no change from current management direction. Alternative C highlights increased recreational opportunities, offering a broader range of visitor services. Alternative D emphasizes the protection of the watershed's natural resources and reduces the overall level of development and services. Alternative E, submitted by the Friends of Lake Crescent, contains actions quite similar to those presented in Alternatives A and C.

No action may be taken until at least 30 days after the Environmental Protection Agency has accepted the document and published a notice of availability in the *Federal Register*.

For further information contact:

Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362-6798

SUMMARY

This document, the *Final Lake Crescent Management Plan*, is the management plan by which the National Park Service would manage the Lake Crescent area of Olympic National Park for the next 10 to 15 years. This plan is combined with an Environmental Impact Statement prepared through an open process involving the public and other agencies of government, the Lower Elwha Klallam Tribe, and special interest groups, including the Friends of Lake Crescent.

The broader context of the park's goals and the National Park Service (NPS) mission, into which this plan is integrated, are explained, thus establishing the basis for preservation of resource values, both natural and cultural, and the provision of opportunities for recreation appropriate to Olympic National Park.

Controversy arose during this planning process over recreational use of personal watercraft (PWC) on Lake Crescent. This plan announces the decision of the Superintendent to close Olympic National Park to the use of PWCs, beginning October 1, 1998. The justification for this action is explained in Appendix A, "Administrative Record Detailing the NPS Decision to Ban the Use of Personal Watercraft on Lake Crescent". This closure may occur earlier should a national policy prohibiting PWC use in units of the National Park System be enacted prior to October 1, 1998.

The *Final Lake Crescent Management Plan* contains five alternative strategies for management of the Lake Crescent area. The range of alternatives includes the four alternatives presented in the draft plan, with modifications based on public comment received, additional issues raised, and further impact analysis. In addition, another alternative has been added since publication of the draft plan. This alternative, depicted in the final plan as "Alternative E," was submitted for consideration during the public comment period by the Friends of Lake Crescent.

Alternative A, identified as the NPS Proposed Action, best satisfies the park and NPS mission, as well as the park's management objectives and long-term vision for Lake Crescent. It recognizes both the need to protect natural and cultural resources and to provide appropriate recreational opportunities for visitors and area residents. Specific actions to be implemented under the NPS Proposed Action are summarized below:

At Fairholm, the store would be relocated and more parking added. The Fairholm campground would be reconfigured to separate recreational vehicle (RV) and tent sites and improve pedestrian circulation, and protect lakeshore vegetation. Boat rentals would continue to be available from a concessioner, and bike rentals would be a future option. A swimming area would continue to be designated. The boat launch ramp would be retained. The dock would be reconstructed. The underground fuel tank would be removed, and an above-ground tank installed, to continue boat fueling service at Fairholm.

At Barnes Point, an accessible restroom with potable water and sewer hookups to the treatment facility would be constructed at Bovee's Meadow. The feasibility of increasing the number of rooms available at Lake Crescent Lodge would be investigated. The dock at the lodge would be repaired or replaced.

At Log Cabin, the A-frame rental units would be removed from the shoreline and replaced with new units, located away from the lakeshore. Some of the RV camping would be replaced with cabins. The boat launch ramp would be retained; the dock, reconstructed. The concession would continue to offer boat and bicycle rentals. An above-ground tank for boat fuel would be installed. Added parking would be constructed. Expanded interpretation of area history would be considered.

At La Poel, site use for overflow camping when Fairholm campground is full would be discontinued. The feasibility of establishing tent camping sites would be evaluated. Day use and picnicking would continue, while ensuring protection of the creek.

At East Beach, new accessible toilets would be installed. In the short term, the parking area would be redesigned to better protect the shoreline. For the long term, a new, upper parking area would be constructed, and beach parking would be designated for visitors with disabilities, only. The feasibility of a new trail with a scenic overlook would be studied.

At North Shore, interpretive displays and accessible toilets would be developed at each end of the Spruce Railroad trail. The Spruce Railroad grade to the western park boundary would be improved, as would the North Shore picnic area. Parking needs at both ends of the trail would be analyzed.

Visitor Services and Facilities throughout the Lake Crescent area would be assessed and improved, including establishing U.S. 101 as a parkway and emphasizing the human and natural history of Lake Crescent. The feasibility of establishing an information center on U.S. 101 east of East Beach Road would be studied. Additional restroom facilities throughout the Lake Crescent area would be provided.

Transportation and Circulation in the Lake Crescent area would also be enhanced. A study of the feasibility of widening East Beach, Piedmont, and Lyre River roads to better accommodate bicycles would be conducted. The park would seek a concessioner to operate a commercial tour boat on Lake Crescent.

Proposals affecting *Water Recreation* include maintaining shoreline access for boats and establishing a 40-mph speed limit on the lake. The park would study the feasibility of creating a citizens' auxiliary to assist park rangers in patrolling the lake. Motorboats, with the exception of personal watercraft, would continue to operate on the lake. A no-wake zone of 300 yards from shoreline would be established adjacent to developed sites, and 100 yards from undeveloped shoreline.

It should be noted that while the *Lake Crescent Management Plan* provides specific direction for future management decisions regarding resource protection and public use for Lake Crescent, it does not contain detailed site designs for any of the management areas. Over the next several years, as funding allows, individual site plans for specific areas around the lake would be completed based upon the recommendations in this plan. These site plans will address various aspects of site development including the location of roads, buildings and facilities, vehicle and pedestrian circulation, recreational facilities, and the protection of natural and cultural resources. In many cases, further environmental analysis will be completed for specific development and construction designs. Many of the proposed actions will also require further cooperation and coordination with other public agencies, Native American tribes, private landowners, area residents, concessioners, and business, recreational, and environmental interests.

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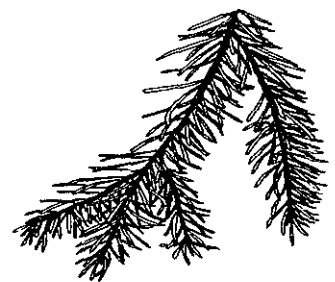
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Purpose of and Need for the Plan

PURPOSE OF AND NEED FOR THE PLAN

Olympic National Park is a major recreation destination for visitors who reside in or travel to the Pacific Northwest. One of the most accessible and popular areas within the park is Lake Crescent, which is nestled in the northern foothills of the Olympic Mountains, approximately 18 miles west of Port Angeles, Washington, along U.S. 101. Over 5,000 acres in surface area, Lake Crescent offers a scenic and largely unspoiled natural setting and a diversity of recreational opportunities. For the past several years, visitor use of the area has increased steadily. Camping and lodging facilities reach maximum occupancy rates in summer (NPS 1996a, NPS 1996b). The lake itself is used for many forms of water recreation. A long-range management plan is needed to effectively address the existing and potential impacts resulting from visitor use at Lake Crescent, and to guide future management decisions concerning resource protection and public use.

The Lake Crescent Management Plan/Environmental Impact Statement provides guidance for the development and use of Lake Crescent over the next 15 to 20 years. Visitor-related use and development is concentrated in six general areas around the lake: Fairholm, Barnes Point, Log Cabin, La Poel, East Beach, and the North Shore. The remainder of the watershed receives relatively little use due to steep terrain and limited access. Furthermore, the southern portion of the watershed (south of U.S. 101) is managed uniformly as designated wilderness, proscribing many uses and improvements. Consequently, this plan focuses on management of uses occurring on and immediately around the lake. The continuation of the existing management direction would prevail for the greater watershed.

It should be noted that while the plan provides specific direction for future management decisions regarding resource protection and public use for Lake Crescent, it does not contain detailed site designs for any of the management areas. Over the next several years, as funding allows, individual site plans for specific areas around the lake would be completed based upon the recommendations in this plan. These site plans will address various aspects of site development including the location of roads, buildings and facilities, vehicle and pedestrian circulation, recreational facilities, and the protection of natural and cultural resources. In many cases, further environmental analysis will be completed for specific development and construction designs. Many of the proposed actions will also require further cooperation and coordination with other public agencies, Native American tribes, private landowners, area residents, concessioners, and business, recreational, and environmental interests.

PLANNING BACKGROUND

The National Park Service (NPS) announced its intent to initiate a planning effort for the Lake Crescent area of Olympic National Park with a press release issued on June 19, 1995. A scoping meeting was held in Port Angeles, Washington on July 11, 1995 to gather public input on planning issues and concerns. Approximately 100 people attended the meeting. In addition, 38 written comments were received at the park, including 23 form letters.

During preparation of the draft plan, park and NPS personnel at the Columbia Cascades Support Office in Seattle concluded that the scope and complexity of the plan warranted the preparation of an environmental impact statement (EIS), rather than an environmental assessment, as had been originally planned. This decision was announced to the public in the *Federal Register* on June 7, 1996, and with a press release issued on June 13, 1996. Scoping comments gathered the previous summer already had been incorporated

PURPOSE OF AND NEED FOR THE PLAN

into the draft plan. In addition, a second 36-day scoping period was announced in the June 13 press release. This second scoping period closed on July 19, 1996.

The National Park Service released the *Draft Lake Crescent Management Plan/EIS* on October 7, 1996. The document's availability was announced to the public by two notices published in the *Federal Register* on October 18 and 21, 1996. Approximately 550 copies of the draft plan were distributed to government officials, agencies, businesses, public libraries, media representatives, special interest groups, and individuals. The public review period, initially scheduled for 60 days, was to have closed on December 18, 1996. However, in response to widespread public interest, the review period was extended twice for 45 days each, bringing the total length of review time to 150 days. The public review period officially closed on March 19, 1997.

The draft plan presented and evaluated four alternative management strategies to guide resource protection, visitor use, and facility development in the Lake Crescent area for the next 15-20 years. The range of alternatives considered consisted of three action alternatives, including a proposed action, as well as a no-action alternative. The *Final Lake Crescent Management Plan/EIS* includes the four alternatives presented in the draft plan, with modifications based on public comment received, additional issues raised, and further impact analysis. It also includes a fifth alternative, depicted as "Alternative E" in this document (see "Alternatives, Including the Proposed Action" section). This alternative was submitted for consideration during the public comment period by the Friends of Lake Crescent and contains many actions similar to those presented in the range of alternatives in the draft plan. (The Friends of Lake Crescent is a nonprofit organization of over 500 concerned citizens, property owners and recreational users of the lake.) In addition, the final plan includes a review and analysis of comments received on the draft document (see "Comments and Responses" section).

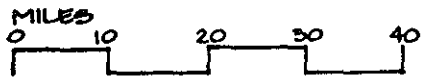
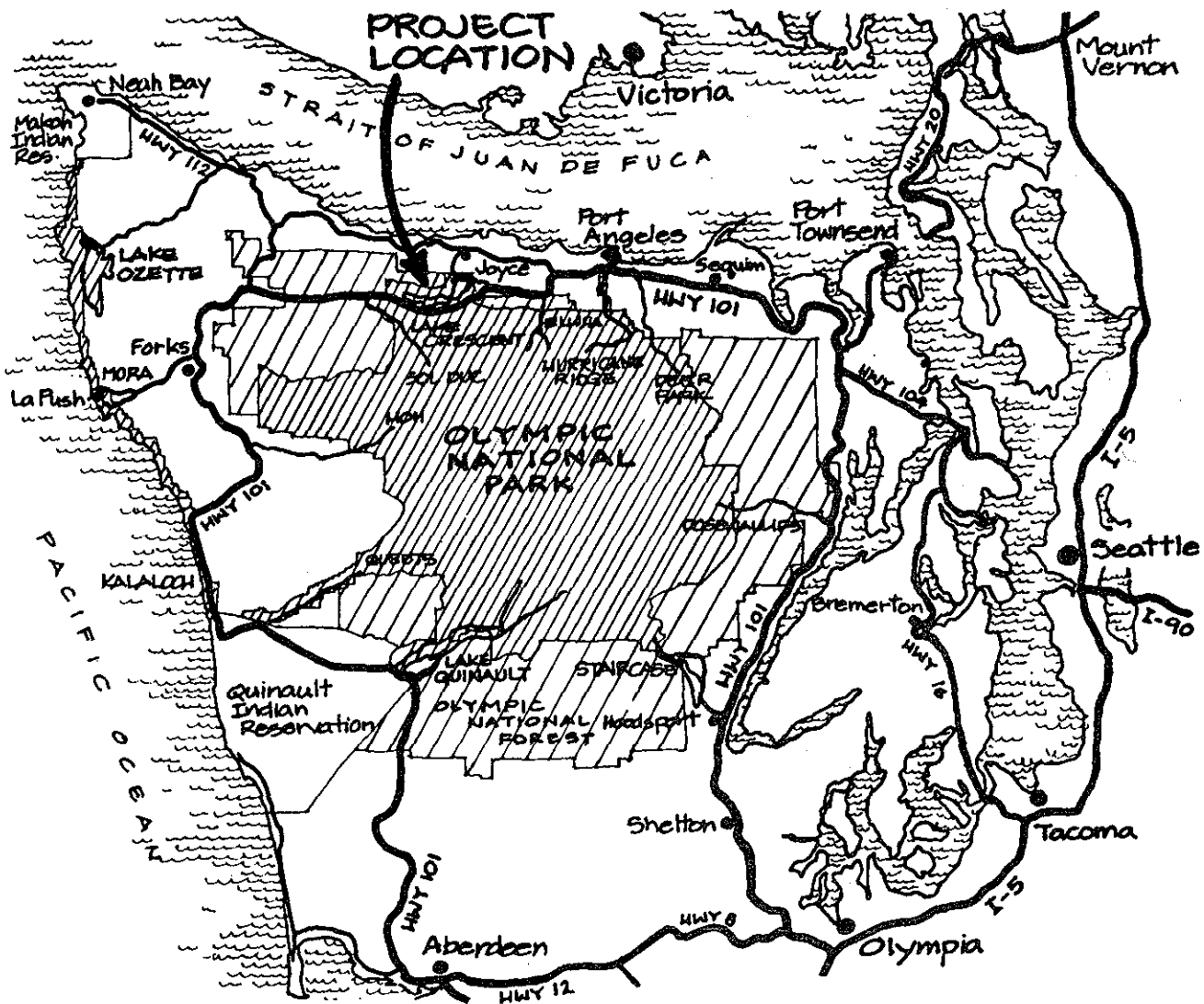
BRIEF DESCRIPTION OF THE PARK AND LAKE CRESCENT AREA

Park Setting

Olympic National Park, located in the center of the Olympic Peninsula in northwestern Washington (see project location map), possesses some of the most outstanding scenic and biologic resources of the Pacific Northwest. The park contains an astonishing array of alpine meadows, glaciers, lakes, streams, coastal beaches, rugged mountains, and pristine forests. Elevations range from sea level to nearly 8,000 feet; rainfall varies from 17 to almost 200 inches per year. The park has been designated by UNESCO (United Nations Educational, Scientific and Cultural Organization) as both a biosphere reserve and a world heritage site. Of the park's approximately 922,000 acres, an estimated 350,000 acres are old-growth forest (>200 years old).

Lake Crescent Watershed

Lake Crescent is situated in the north-central portion of the Olympic Peninsula, approximately 18 miles west of Port Angeles and 25 miles northeast of Forks. U.S. 101 serves as the major transportation route through the planning area, linking Port Angeles, Forks, and coastal areas to the west with the rest of the region. Lake Crescent lies in the bottom of a glacial valley and is surrounded by steep terrain, with the



PROJECT LOCATION

LAKE CRESCENT MANAGEMENT PLAN/EIS OLYMPIC NATIONAL PARK

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PURPOSE OF AND NEED FOR THE PLAN

exception of some areas along the lakeshore, where slopes become more gentle. The Lake Crescent watershed occupies about 30,000 acres both within and outside the 922,000-acre Olympic National Park. The lake itself covers 5,127 acres, and is about 12 miles long. Although comprising a relatively small area of the park, the watershed's scenic, historic and biologic resources make it an important part of the park.

Within the Lake Crescent watershed, the National Park Service manages 27,326 acres of federal land (ninety-one percent of the watershed). Private landowners, including those who own summer homes or permanent residences, hold approximately 117 acres in 106 tracts. The remaining acreage within the watershed is outside park boundaries and is managed by the Washington State Department of Natural Resources and the U.S. Forest Service. Approximately sixty percent of the watershed, south of U.S. 101, is congressionally designated wilderness.

Most development and recreational activity takes place in proximity to the lake. Lake Crescent Lodge, Log Cabin Resort, and Fairholm campground provide a variety of overnight accommodations. Some of the more popular recreational activities include fishing, canoeing, kayaking, motorboating, water skiing, swimming, picnicking, hiking, bicycling, environmental education, and sightseeing.

Historical and archeological sites relate to a variety of themes including homesteading, transportation and industry, and recreation. While many of the cabins and resorts built by early settlers on the lake no longer remain, much has been documented about their existence. Important examples remain in the Barnes Point area. In many cases, historic sites lie on landforms where prehistoric sites are also expected.

PLANNING CONTEXT

Legislative Mandates

A number of laws, NPS management policies, and other documents affect management of the park and direct park planning. These elements provide broad guidance and context for this planning effort and help define what is appropriate in terms of NPS management actions and desired visitor experience. The two most fundamental laws governing the appropriateness of actions within national park units are the park's enabling legislation and the NPS Organic Act of 1916. These laws help establish the purposes of the park—the reasons for which the park was set aside as part of the national park system. The Organic Act, as reaffirmed and amended in 1970 and 1978, establishes a broad framework of policy for administration of the park system:

The Service thus established shall promote and regulate the use of the Federal areas known as national parks, monuments, and reservations...by such means and measures as conform to the fundamental purposes of the said parks, monuments and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wildlife therein, and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

Authority to regulate NPS areas is an enumerated power under the property clause of the U.S. Constitution. The NPS Organic Act delegates this rulemaking authority to the Secretary of the Interior:

The Secretary of the Interior shall make and publish such rules and regulations as he may deem necessary or proper for the use and management of parks, monuments, and reservations under the jurisdiction of the National Park Service.

General and permanent rules promulgated under this authority are codified in the *Code of Federal Regulations* (CFR), Title 36, which contains regulations specific to the National Park Service. 36 CFR Part 2 is dedicated to regulations dealing with resource protection, public use, and recreation. Special regulations applicable only to Olympic National Park are found in § 7.28.

Additional federal legislation that affects the management of national park areas includes the National Environmental Policy Act, the Endangered Species Act, Wilderness Act, Clean Water and Clean Air Acts, the National Historic Preservation Act, and other legislation and regulations ensuring the protection of resources and visitor use.

Section 5 of the enabling legislation for Olympic National Park placed the following additional constraints on the management of the park. It stated that

Nothing herein contained shall affect any valid existing claim, location, or entry made under the land laws of the United States, whether for homestead, mineral, right-of-way, or any other purpose whatsoever, or shall affect the right of any such claimant, locator, or entryman to the full use and enjoyment of his land, nor the rights reserved by treaty to the Indians of any tribes.

Park Purpose

The act establishing Olympic National Park, approved on June 29, 1938 (H.R. 10024) was accompanied by a report from the House Committee on the Public Lands. The committee report (Report No. 2247) more specifically defined the purposes of the park, stating

The purpose of the proposed national park is to preserve for the benefit, use and enjoyment of the people, the finest sample of primeval forests of Sitka spruce, western hemlock, Douglas fir, and western redcedar in the entire United States; to provide suitable winter range and permanent protection for the herds of native Roosevelt elk and other wildlife indigenous to the area; to conserve and render available to the people, for recreational use, this outstanding mountainous country, containing numerous glaciers and perpetual snow fields, and a portion of the surrounding verdant forests together with a narrow strip along the beautiful Washington coast.

An additional purpose of the park is to preserve for future use and enjoyment the character and values of the Olympic Wilderness. On November 16, 1988, Congress enacted the Washington Park Wilderness Act (P.L. 100-668) which designated 876,669 acres of Olympic National Park as wilderness and 378 acres as potential wilderness. These lands, known as the Olympic Wilderness, are managed in accordance with applicable federal laws, regulations, policies, and plans including the Wilderness Act of 1964, NPS wilderness management policies (NPS 1988), and Olympic National Park's *Master Plan* (NPS 1976) and

Wilderness Management Plan (in prep.). Approximately 60 percent (roughly 18,000 acres) of the Lake Crescent watershed, on the south side of U.S. 101, is congressionally designated wilderness.

Park Significance

Sometimes referred to as "three parks in one", Olympic National Park's 922,000 acres protect and encompass three distinct ecosystems. These include some of the largest remaining tracts of Pacific Northwest old-growth forest and on the west side of the park, temperate rain forest. The high country of the Olympic Mountains showcases rugged mountain scenery and subalpine and alpine plant communities while the 63 miles of wilderness coastline protects a diversity of intertidal organisms. The park has twice been internationally recognized for its scientific and scenic values and is designated a World Heritage Site and a Biosphere Reserve.

Conditions within the park's three ecosystems are, to a great extent, pristine and little changed from the time of the first Euroamerican exploration and settlement. Visitors to the park's wilderness can experience many of the same sights and sounds known to much earlier residents of the area. With the exception of the gray wolf and possibly the fisher, all known members of the park's ecosystems are still present. The largest known specimens of Sitka spruce, western redcedar, and Alaska yellow cedar are found within the park. The park's free-flowing rivers provide habitat for all six species of Pacific salmon, many of which are in severe jeopardy elsewhere in their native range. These attributes, along with others, combine to make Olympic's unspoiled wilderness character a significant and welcome resource for the many visitors who come seeking respite from the modern world.

The park also protects a variety of endemic species, which are plants or animals naturally confined to a specific region and are found only within a limited geographic area. Over time, the Olympic Peninsula's isolation has led to the presence of a number of endemic species, most of which are found within the park. Seven kinds of plants and 15 kinds of animals which are found only on the Olympic Peninsula are protected within Olympic National Park.

Human presence in the area prior to park establishment is reflected in archeological discoveries of campsites and village sites of hunting and gathering peoples, and by the structures and trails built by pioneering Europeans who explored and settled the river valleys and coastal prairies. The preservation and interpretation of these cultural resources lends important perspective to understanding and valuing the wilderness of forest, mountain and coast.

Management Vision for Lake Crescent

The management vision for Lake Crescent identifies what must be preserved as well as what types of experiences visitors can expect in the Lake Crescent area. It provides the basis for management objectives and decisions. In creating a vision for Lake Crescent's future, park management must simultaneously acknowledge the area's rich history of human use and recreation and recognize that it is one of the most outstanding natural features in the Pacific Northwest.

For many years, Lake Crescent has been a popular destination for local and regional residents and today is enjoyed by an ever-growing number of both national and international visitors. U.S. 101 serves as a major east-west transportation route along the south shore of the lake. An abandoned railroad grade runs along the north shore. Approximately 117 acres, divided into 106 tracts, are privately owned and occupied on a seasonal or full-time basis. Several commercial facilities, some dating back to the early part of the twentieth century, provide a variety of visitor services around the lake.

A vital component of Lake Crescent as a recreational destination is the natural and scenic integrity of the area. Old-growth forest covers much of the watershed, providing habitat for a variety of mammals and birds, some of them rare or threatened. Outstandingly clear water provides not only scenic and recreational value, but habitat for the lake's several endemic fish species, as well as a variety of other animals and plants. Any vision of the future must ensure the continued ecological integrity of the lake and adjoining watershed.

Based on the above framework, the NPS vision for Lake Crescent is as follows:

Lake Crescent will continue to offer a premier park experience to all visitors. It will remain a destination point for many people, a scenic backdrop for many more, and a threshold experience for those taking the time to walk into the adjoining wilderness.

The clarity of water, endemic fish populations, sensitive plant and animal species, old-growth forests, archeological sites, cultural landscapes, historic structures, and spectacular scenic resources will be maintained while accommodating a diversity of recreational experiences that are compatible with the preservation of these high quality resources and the serenity of the lake environment.

MANAGEMENT OBJECTIVES

The following management objectives serve as a guide for future management of the Lake Crescent area. These objectives are: consistent with legislation, NPS policies, the purposes of the park, the 1976 *Master Plan*, and the park's vision for Lake Crescent; provide for the perpetuation of natural and cultural resources; and allow for a variety of appropriate recreational activities. The objectives describe desired conditions to be achieved in the Lake Crescent area. Various ways of attaining these conditions are presented in the planning alternatives.

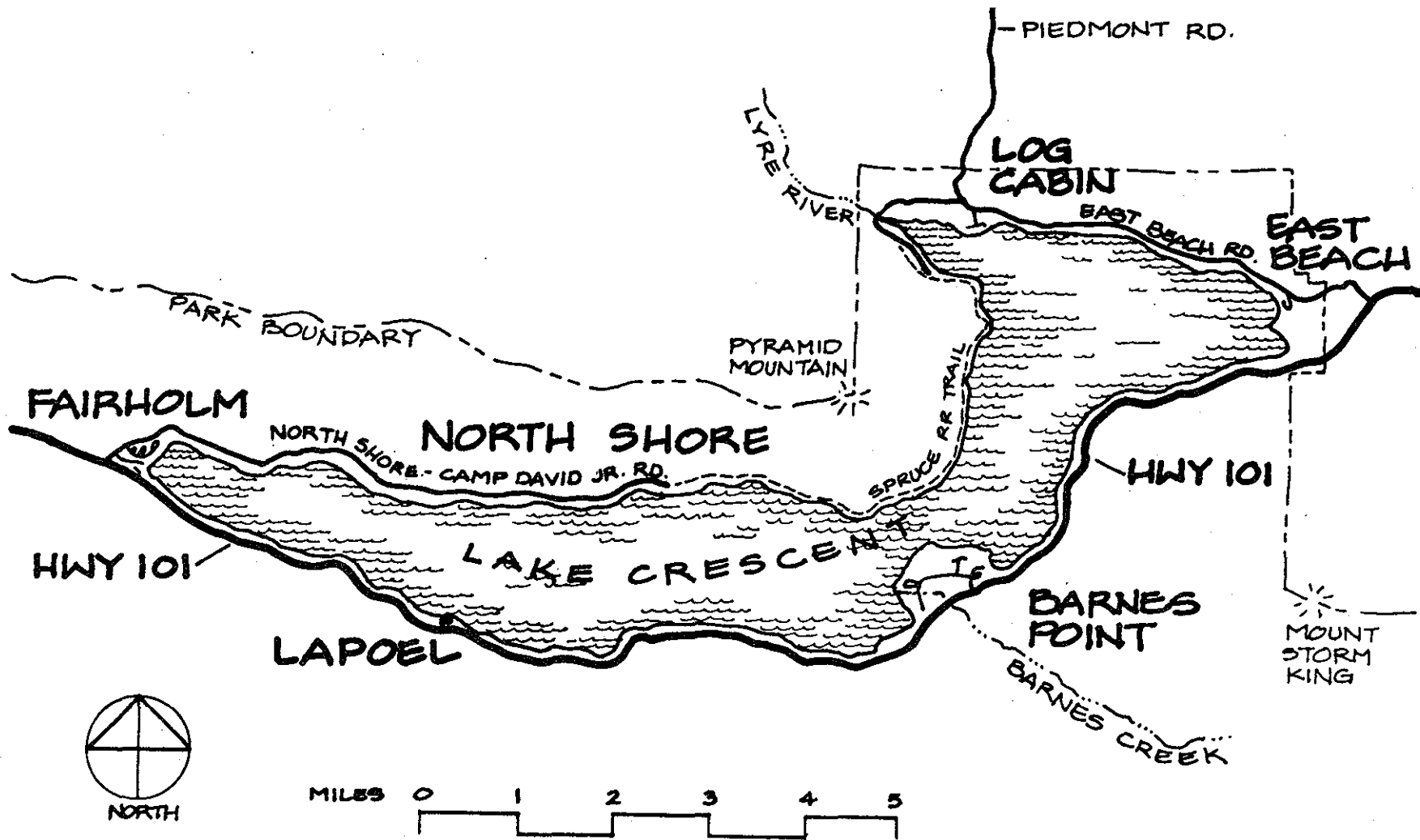
1. Protect the pristine quality of the water and ecology of the Lake Crescent watershed.
2. Provide opportunities for a variety of outdoor experiences and recreation uses that minimize conflicts between recreational users, and are compatible with the protection of park resources and values.
3. Retain and preserve old-growth forests and natural processes in the Lake Crescent watershed.
4. Protect critical spawning and rearing areas in the watershed which are used by the lake's unique fish populations, and maintain natural terrestrial and aquatic communities upon which they depend.

PURPOSE OF AND NEED FOR THE PLAN

5. Provide safe pedestrian and bicycle access through the Lake Crescent area for visitors and the traveling public and reduce conflicts between non-motorized and motorized uses.
6. Improve visitor orientation, interpretation, and visitor services in the Lake Crescent area to better serve visitors traveling along the U.S. 101 coastal corridor, including westbound visitors destined for the Olympic coastal and rainforest areas.
7. Maintain, preserve, and interpret the buildings and cultural landscape including, but not limited to, Lake Crescent Lodge Historic District, Spruce Railroad, Rosemary Historic District, and the Storm King Ranger Station (also known as the restored Morgenroth Cabin).
8. Provide a range of overnight accommodations and other visitor facilities that are in keeping with the historic setting and character of the area.
9. Provide for the continued use of private property within the Lake Crescent watershed while minimizing the impacts and effects of private development on the visitor experience, lake ecology, scenic and visual quality, and the historic setting.
10. Continue to purchase private property in the Lake Crescent area under an opportunity purchase situation when a willing seller is present.
11. Maintain park operational capability (including support facilities and staffing) in the Lake Crescent watershed to protect resources and serve the visitor.
12. Continue to inventory and monitor wildlife, vegetation, and water quality in the Lake Crescent watershed.
13. Foster appreciation and protection of cultural and natural resources of the Lake Crescent area through inventory, monitoring, and interpretation.
14. Direct and manage human activities in the Olympic Wilderness in accordance with the Wilderness Act to minimize human impacts on wilderness resources and ecosystem processes and to provide a high quality wilderness experience for park visitors.

ISSUES

For planning purposes, six management areas have been identified at Lake Crescent and include Fairholm, Barnes Point, Log Cabin, La Poel, East Beach, and North Shore (see planning area map). These areas were selected based upon existing and potential development and recreational uses. A brief description of each management area and associated issues is provided. In addition to these six management areas, three broad topics were identified that present issues on a lakewide basis. These topics include visitor services/facilities, transportation/circulation, and water recreation.



LAKE CRESCENT PLANNING AREA

OLYMPIC NATIONAL PARK

149-60164 DEC 97

Fairholm

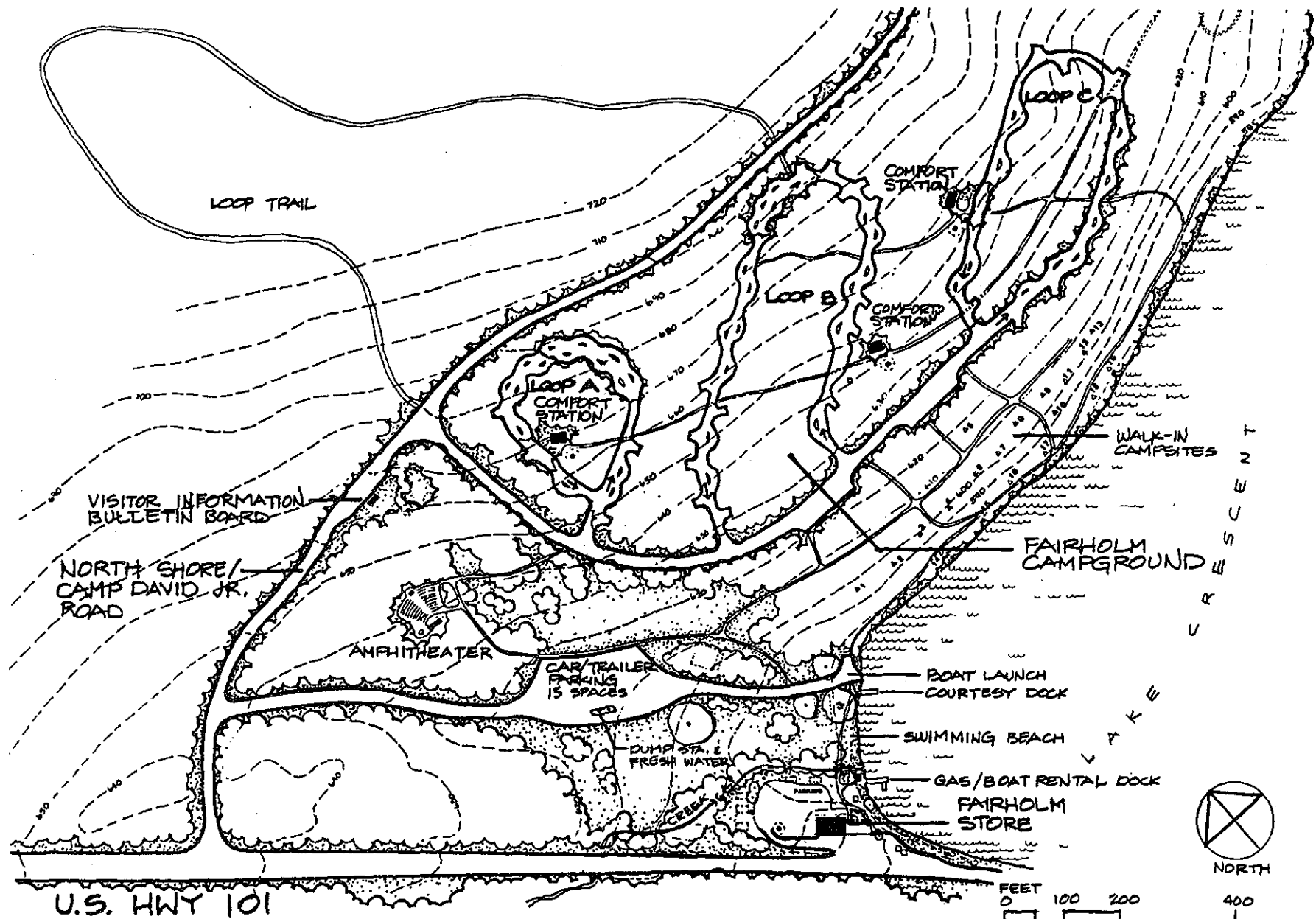
Fairholm is located at the western end of Lake Crescent. Visitor facilities include a small general store and cafe, which also offers boat rentals and boat fuel sales, an NPS-operated campground, amphitheater, dock, boat ramp, and a parking area for boat trailers (see Fairholm site map).

Issues

- The proximity of the store to U.S. 101 results in minimal parking at grade, especially for larger recreational vehicles (RVs). This in turn contributes to hazardous ingress from and egress to the highway.
- Parking behind the store is unpaved, individual spaces are not delineated, and access for RVs is difficult.
- The trail from the store to the beach is in poor condition, which presents a safety concern for users and causes erosion of sediment into the lake.
- Campground use fluctuates based on weather conditions and tends to be highest during drier years when conditions are more favorable. Resource damage is clearly evident and includes the loss of the vegetative understory and tree damage due to soil compaction and trees being cut for firewood. Root rot is also a serious problem mainly for hemlock trees, making them vulnerable to blowdown during storms.
- The campground does not consistently provide visitors with a desirable experience. The campground was not originally designed to handle the current numbers and types of users. Sites are close together and often receive heavy use, with multi-family or large groups (including multiple vehicles, trailers, and watercraft) occupying one site. Such use results in the expansion of eroded, bare areas around sites and encroachment on adjacent campsites. Deteriorated road conditions and accumulation of downed trees also contribute to undesirable campground conditions.
- The cove at Fairholm is relatively narrow. Development here is concentrated in a fairly small area resulting in occasional conflicts between users. Personal watercraft create noise and safety hazards for other lake users in this confined area.

Barnes Point

Located along the southeast shore of Lake Crescent, Barnes Point offers some of the most level terrain to be found along the lakeshore. As such, it has been an important location for development. Primary access is from U.S. 101 onto Lake Crescent Road, which provides secondary access around Barnes Point. Lake Crescent Road was once the original route for the highway, but was rerouted to its present location in 1984 to reduce conflicts between commercial, recreational, and residential traffic.



U.S. HWY 101

FAIRHOLM
OLYMPIC NATIONAL PARK

LAKE CRESCENT

KA-60160 APR 96

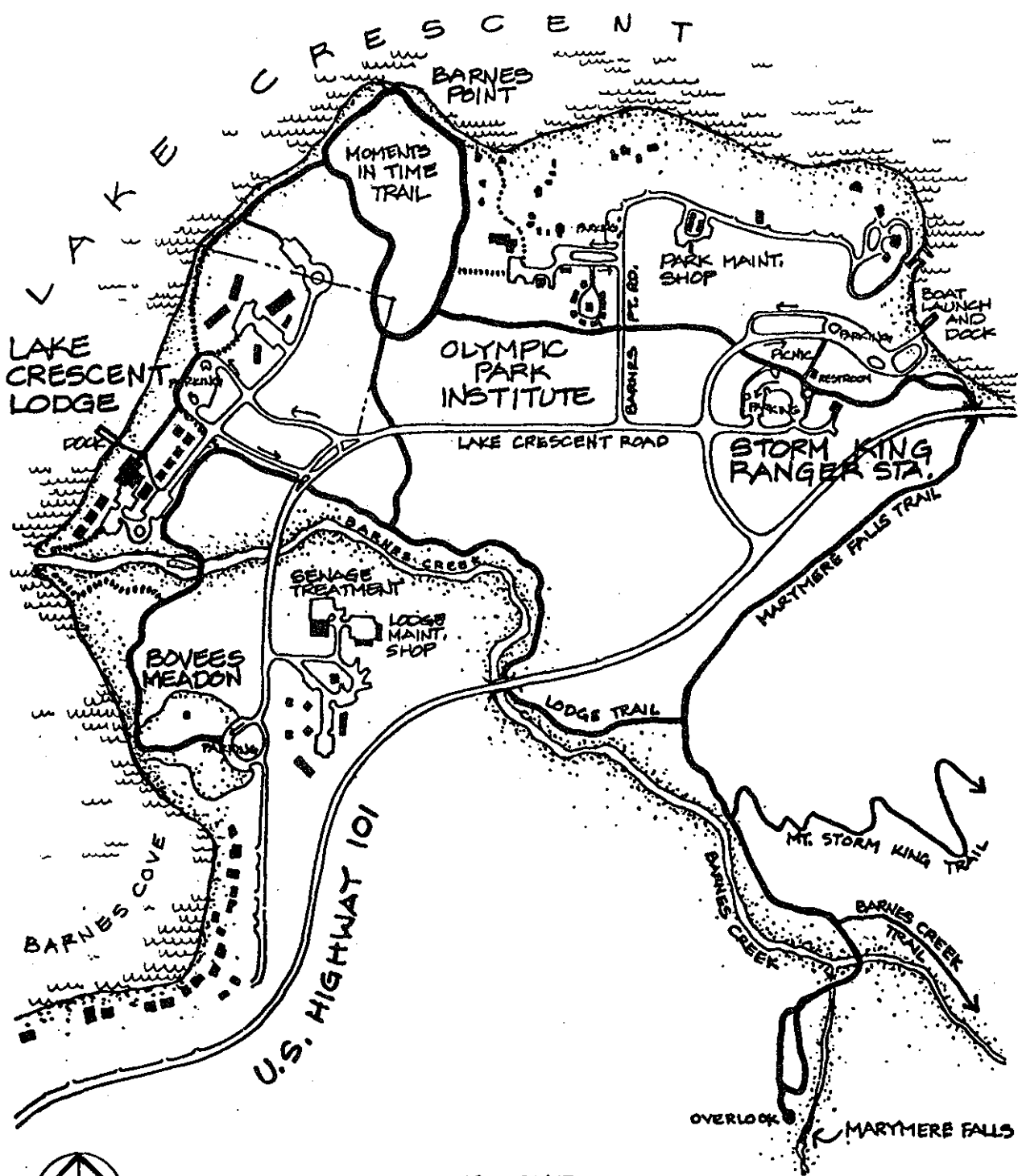
PURPOSE OF AND NEED FOR THE PLAN

Located along the southeast shore of the lake, Barnes Point is the primary visitor contact point for Lake Crescent. The Storm King Ranger Station (also known as the Morgenroth Cabin), which is listed on the National Register of Historic Places, is located here and provides visitor information regarding recreational opportunities. Visitor-oriented improvements in the vicinity of the ranger station include restrooms, vehicle parking (for cars, RVs, and boat trailers), a boat ramp, and dock (see Barnes Point site map). Other national register-eligible properties in the Barnes Point area include Lake Crescent Lodge and Rosemary Inn. Lake Crescent Lodge is operated by National Park Concessions under the terms of a concession contract. A privately run tour boat, the *Storm King*, operated from this area during the summers of 1994 through 1996. The Olympic Park Institute, a non-profit organization which conducts environmental education programs in partnership with the park, is located in the restored, historic Rosemary Inn. An extensive trail system provides pedestrian access to various places on Barnes Point, and connects with the Barnes Creek trail. Many of these trails are designated as "accessible with assistance".

Other facilities in the Barnes Point area include several ranger residences, concession employee housing, a boathouse, maintenance buildings, and treatment facilities for water and sewage that serve the development on Barnes Point. Bovee's Meadow, on the western shoreline of Barnes Point, serves as a day-use area and provides parking, a vault toilet, and an informal swimming area.

Issues

- Barnes Creek is one of the sole spawning streams for the resident Crescenti trout. Disturbance by visitors during spawning, disturbance of redds (spawning nests or depressions) after spawning, and water play activities, including boating, near the mouth of the creek potentially may harm this population.
- Barnes Creek is the major stream entering Lake Crescent, and provides a riparian habitat corridor that is used by several different wildlife species, including river otter and hooded mergansers. Rare harlequin ducks nest along the banks of the creek each spring, as does the American dipper, or water ouzel.
- The use of personal watercraft (PWC) in the area has resulted in conflicts, not only with other day users, but nearby residents. Noise generated by these watercraft disturb the serenity of the lake for many people. Human safety is also a concern with PWC use.
- Many social (undesignated) trails have been established through repeated visitor use, causing damage to vegetation and erosion along the banks of Barnes Creek. The mouth of Barnes Creek, which is near critical habitat for spawning trout, receives especially heavy use because of its proximity to Lake Crescent Lodge.
- The parking area at Storm King Ranger Station is inadequate to meet peak use periods during the summer. During these periods, boat trailers are parked along the access road, resulting in damage to vegetation and disruption of traffic flow.
- The concessioner has indicated an interest in expanding the number of guest rooms at Lake Crescent Lodge and constructing a facility which could be used for interpretive programs and meetings.



LEGEND

-  ROADS
-  DEVELOPED TRAILS
-  UNDEVELOPED TRAILS
-  BUILDINGS

BARNES POINT

LAKE CRESCENT

OLYMPIC NATIONAL PARK

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Log Cabin

The Log Cabin management area includes the Log Cabin Resort and the Lyre River area on the northeast side of Lake Crescent. The resort is comprised of a main lodge, cabins and A-frame chalets, parking areas, maintenance building, RV camping area, boat ramp, and docking facilities (see Log Cabin site map). The resort is open from mid-winter through late fall.

Log Cabin has no formally designated day-use area, although the area in front of the lodge is typically used for this purpose, while the shoreline near the RV camping area and the area in front of the A-frames is used primarily by overnight visitors to the resort.

The Lyre River is the lake's only outlet and provides critical fish spawning habitat. Presently, the entrance to the river is delineated with buoys to minimize habitat disturbance by watercraft.

Issues

- The Lyre River, especially the several hundred feet immediately from the lake, is the sole spawning habitat for the endemic Beardslee trout. Recreational use by boaters, bathers, and anglers may potentially harm this population.
- Parts of the shoreline show signs of overuse, particularly near the mouth of Log Cabin Creek adjacent to the RV area; boats often pull up on the small beach next to the creek, resulting in erosion along the lakeshore and loss of shoreline vegetation. Additionally, several social trails cross this stream channel upstream and have denuded much of the riparian vegetation.
- Resource impacts associated with the RV campground are evident and include soil erosion and loss of wildlife habitat within the riparian zone of Log Cabin Creek and along the lakeshore.
- Log Cabin Resort has developed with a variety of architectural styles that are inconsistent with a national park setting.

La Poel

La Poel is a relatively small management area west of Barnes Point on La Poel Point. Originally the site of a resort, the area was developed as a campground by the Civilian Conservation Corps (CCC) in 1934-35. Although the campground was in service for many years, it was closed following construction of the Fairholm campground. Closure of the campground was an administrative decision based partly on economic considerations. La Poel is now used as a day-use area for picnicking and sometimes serves as an overflow campground when the Fairholm campground is full (see La Poel site map).

Issues

- The impacts of human use are evident from the presence of social trails and loss of vegetative understory and erosion of the bank above the shoreline. Foot traffic along the section of La Poel Creek

EAST BEACH ROAD

ASSIGNED AREA LIMITS

SEWAGE TREATMENT FACILITY

LOG CABIN CREEK

CONCESSIONER HOUSING

TREE COVER

EMPLOYEE INCLUDING 3 UNITS

CABIN AREA 6 UNITS

LIFT STA.

PARKING

RV DUMP STA.

LAUNDRY

MAINTENANCE BLDG.

FOOT BRIDGE

RESTROOM & LAUNDRY

BOAT DOCKS

PRIVATE RESIDENCES

RECREATION AREA

4 CAMPER CABINETS

BOAT RAMP

LODGE WITH 4 MOTEL UNITS

VIEWING DOCK

RV CAMPING AREA 40 UNITS

A-FRAME CHALETS 12 UNITS

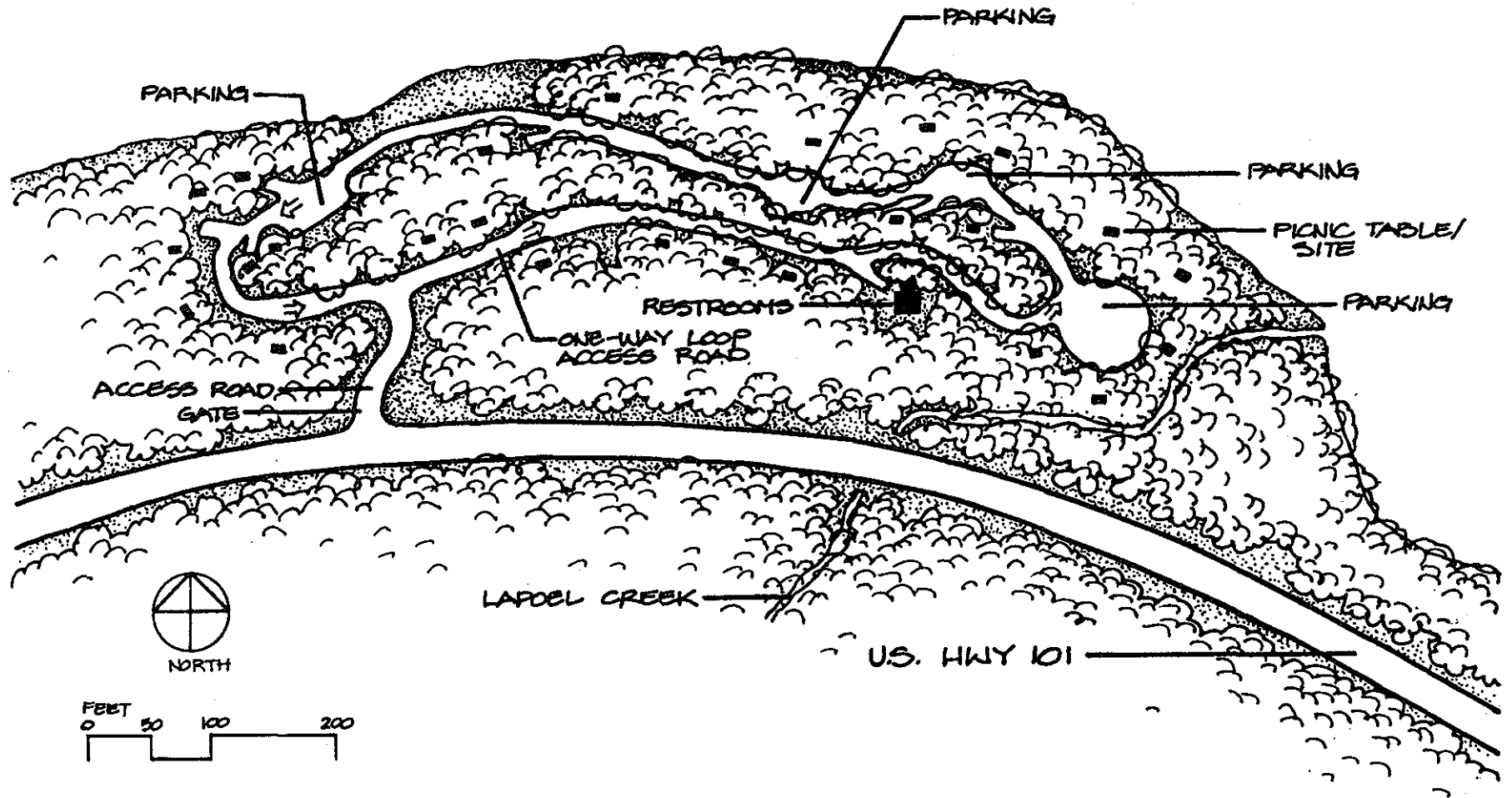
SWIMMING AREA



LOG CABIN
OLYMPIC NATIONAL PARK

LAKE CRESCENT
149-60159 APR 96

L A K E C R E S C E N T



LA POEL LAKE CRESCENT
OLYMPIC NATIONAL PARK

149-60154 APR 96

adjacent to the old campsites has caused a loss of riparian vegetation and erosion in the stream channel as well.

East Beach

East Beach is heavily used during the summer months as a day-use area for swimming and picnicking (see East Beach site map). Like Bovee's Meadow, it is used predominantly by Clallam county residents and tends to be family-oriented. The water here is shallower and warmer than other swimming areas on the lake. Parking is available for approximately 25 vehicles. Access is available off of East Beach Road; the grade is steep (15 percent) making access for RVs difficult. Signs are posted at the top of the grade indicating that the road is unsuitable for trailers.

Issues

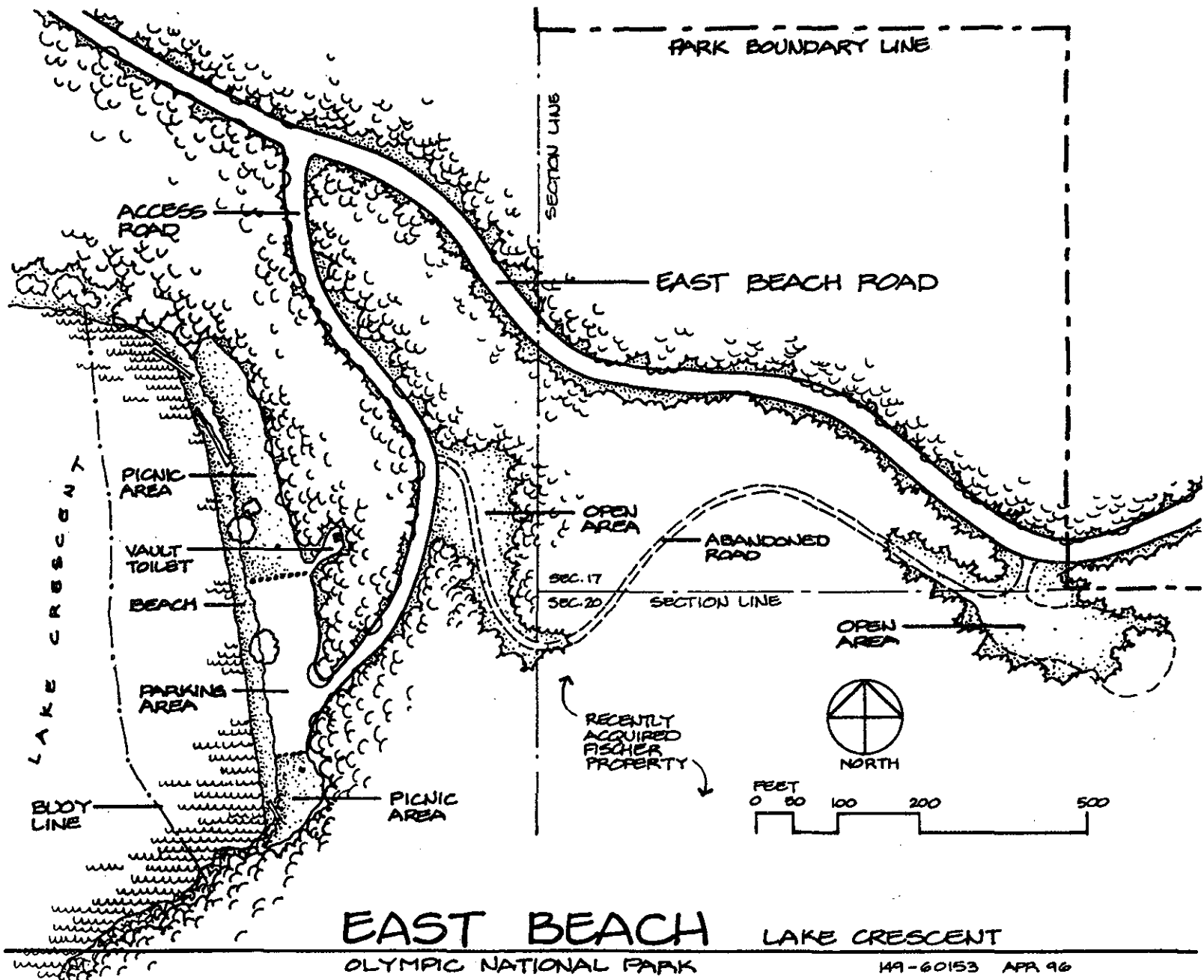
- During busy times of the summer, cars park along the access road, decreasing safety for other vehicles and pedestrians.
- Proximity of vehicle parking to the lake and heavy use during the summer months is evidenced by erosion along the shoreline and overuse of the vault toilets.
- Wave action from winter storms appears to contribute to erosion of the lakeshore at East Beach. Park staff believe that this erosion may be exacerbated by the proximity of parking to the shore, which has eliminated lakeshore vegetation and increased the susceptibility of exposed soils to erosion.
- The vault toilets at East Beach are pumped out on a regular basis; however, they frequently experience odor problems as a result of heavy use during the summer months.

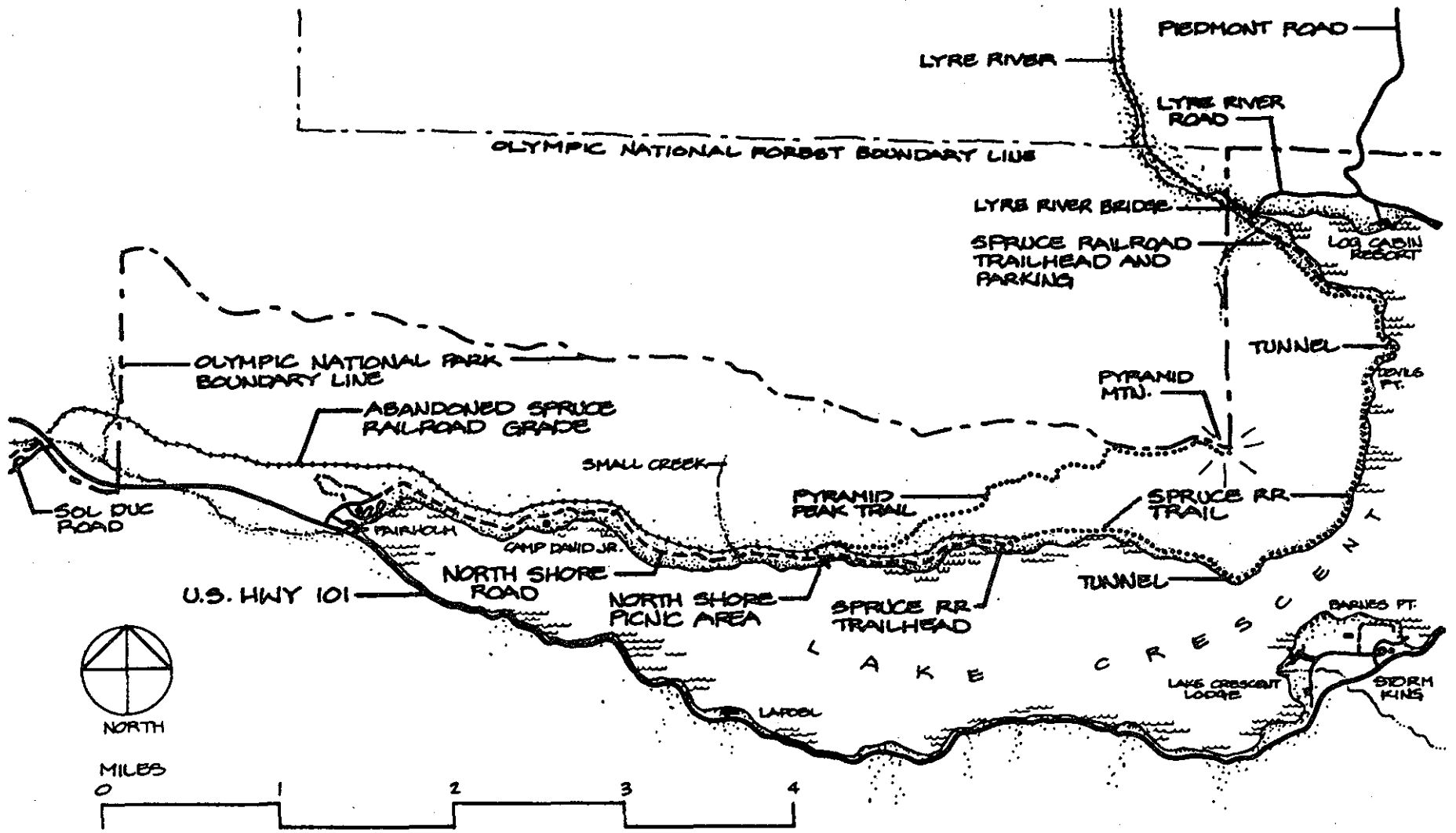
North Shore

The North Shore management area encompasses the northern shoreline of the lake from Fairholm to the Lyre River. The North Shore picnic area, the Spruce Railroad trail (eligible for the National Register of Historic Places), and Camp David Jr. are located in this management area (see North Shore site map). Numerous private landowners are also present along the North Shore Road and Lyre River Road.

Camp David Jr. is located approximately two miles from U.S. 101 on the North Shore Road. The camp is primarily youth-oriented and provides overnight accommodations and water recreation activities for a variety of groups including family, school, and church groups. It is owned and operated by the Clallam County Parks and Recreation Department.

The Spruce Railroad trail begins just west of the Lyre River bridge and offers hikers an easy four-mile hike to the North Shore picnic area to the west. The remainder of the Spruce Railroad grade is unimproved, although it is used by both hikers and mountain bikers. The Spruce Railroad grade (including the present trail, as well





NORTH SHORE

LAKE CRESCENT

OLYMPIC NATIONAL PARK

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as the unimproved sections) is presently under consideration by the Washington State Department of Transportation as an alternate route for bicycle traffic traveling U.S. 101.

Issues

- Parking at the North Shore picnic area is poorly delineated. Some erosion of the bank separating the beach from the picnic area has occurred, most likely due to the presence and use of social trails and a lack of stairs to channel foot traffic along a designated path.
- The Spruce Railroad grade beyond the west end trailhead is not a designated trail and receives little maintenance. Access along this length of the grade by hikers and mountain bikers is impeded by fallen trees and places where stream culverts are failing.

Visitor Services/Facilities

There are several aspects of park administration that address the provision of visitor services and facilities. These include the development and implementation of interpretive and orientation programs, and concession operations.

Issues

- A sense of entry into Olympic National Park is lacking. Other than a small sign at the park's eastern boundary, many visitors are unaware that they have entered a national park. The presence of commercial traffic along U.S. 101 compounds this perception.
- Given the rich history of the Lake Crescent area, interpretive opportunities are underdeveloped.
- Concession operations are not conducted within an overall plan for the Lake Crescent area. Additions and modifications to existing facilities have occurred in the absence of long-term planning goals, resulting in physical improvements that are inconsistent with a national park setting. Future expansion of concession operations without a long-term plan may detract from the ambience of this setting and result in negative impacts to natural and cultural resources, as well as the visitor experience.
- There is no roadside visitor orientation center for westbound travelers on U.S. 101. Westbound travelers must leave U.S. 101 to reach the Olympic National Park Visitor Center in Port Angeles, which is located at the beginning of the Hurricane Ridge Road. Visitors who do not stop there have no opportunity to obtain information about Lake Crescent to plan their visit.
- Given the overall size of the park, there are relatively few areas that are flat and accessible to the full spectrum of users. Areas in the Lake Crescent watershed, such as Barnes Point and the Spruce Railroad trail offer excellent opportunities for universally accessible trails and facilities.

Transportation/Circulation

The primary means of visitor transportation around Lake Crescent is the automobile. Some visitors bring their bicycles to ride in the area, while others tour the Olympic Peninsula by bicycle. Currently, the only continuous travel route around the lake, for both motorized and non-motorized transportation, is U.S. 101. In the *Lake Crescent Alternatives Analysis* (WSDOT 1997a), the Washington State Department of Transportation (WSDOT) analyzed a variety of alternative travel routes for non-motorized traffic around Lake Crescent. The short-term recommendation is to install flashing warning signs on U.S. 101 to alert motorists when cyclists are on the road. The long-term recommendation is to make improvements to the north shore of Lake Crescent to better accommodate bicyclists, pedestrians and equestrians.

Issues

- The mix of non-motorized and motorized traffic along U.S. 101 causes significant safety concerns, as well as the potential for traffic congestion and delays (WSDOT 1997a). Signs at either end of Lake Crescent warn cyclists of the potential hazards associated with this section of U.S. 101 and encourage the use of Clallam County's transit system.

Water Recreation

Boats have played a significant role in the history of Lake Crescent and were present on the lake prior to the creation of Olympic National Park. Recreational use of the lake includes fishing, powerboat use, canoeing, sailing, water-skiing, and PWC use. Based on NPS observations, use of the lake for water recreation has increased in the past several years, and will likely continue to do so as more people travel to the Olympic Peninsula.

Issues

- In recent years, the park has received complaints about PWC use and its impact on scenic and historic resources. The potential for increased safety concerns and conflicts between different users is great. Attendant increases in noise levels may also detract from the visitor experience.

ISSUES BEYOND THE SCOPE OF THIS PLAN

The following issues are beyond the scope of this planning effort and are not addressed further in this document.

Road Maintenance Along U.S. 101

The National Park Service has exclusive jurisdiction over that portion of U.S. 101 within Olympic National Park. However, through a cooperative agreement between the Park Service and the Washington State Department of Transportation, the state is responsible for road maintenance on the highway including surfacing, striping, drainage, snow removal, signage, guardrails, bridges, retaining walls, storm damage

repair, vegetation control along the road shoulders and maintenance of pullouts. The cooperative agreement expires in 1998. Park staff and WSDOT staff have cooperated well in addressing all of the maintenance concerns on U.S. 101 at Lake Crescent, and it is anticipated the cooperative agreement will be renewed with little, if any, revision.

Road Maintenance Along East Beach Road, Piedmont Road, Lyre River Road and North Shore Road

The National Park Service performs routine maintenance activities on these four roads within the park as part of a cooperative effort with Clallam County. The park and the county have worked together in maintaining these roads, as the park does not own the roads. In the past, certain county roads within the park, such as the Sol Duc Road, were transferred to Olympic National Park. This transfer enabled the National Park Service to redesign and reconstruct these roads. It appears at this time that transfer of those portions of East Beach Road, Lyre River Road, Piedmont Road, and the North Shore Road within the park will not take place due to legal constraints. Without transfer of these roads to the park, it will be impossible for the National Park Service to undertake major improvements to these roads. The park will continue to perform necessary routine maintenance activities and work cooperatively with Clallam County as needed to keep the roads open. However, the park and county face the challenge of working together toward planning and funding future major repairs and possible reconstruction of the roads to keep them in good condition. Development of a cooperative agreement may be necessary to formalize this joint working relationship.

Establish Priorities for Land Acquisition in the Lake Crescent Area

Land acquisition is guided by the park's land protection plan (NPS 1984a). This document identifies alternative methods to provide for the protection of resources, for visitor use, and for development; identifies the minimum interests necessary for those purposes; and establishes priorities for acquisition of land or interests in land (NPS 1988). In accordance with current Department of the Interior policy, in the absence of incompatible threats, acquisition will only be done when a willing seller, willing buyer situation exists. Management objective # 9, "Provide for the continued use of private property within the Lake Crescent watershed while minimizing the impacts and effects of private development on the visitor experience, lake ecology, scenic and visual quality, and the historic setting" would be achieved through continued implementation of the land protection plan.

Fire Prevention and Suppression

Olympic National Park is currently not properly equipped or trained to address structural fire incidents at Lake Crescent. A local fire district may respond to a Lake Crescent structural fire, but there is no formal agreement in place between the National Park Service, private landowners, and Fire District 2 or Fire District 4. Neither of these two fire districts are under any legal obligation to respond to private structural fires within Olympic National Park's boundaries. It also needs to be noted that these two fire districts are volunteer, and their response could be 30 minutes or greater. As in any emergency, Olympic National Park would respond to assist in the incident.

Olympic National Park would respond accordingly to all wildland fire incidents within all areas of the park. Park staff has the necessary expertise and resources to address most normal wildland fire situations, including those at Lake Crescent.

The fire prevention program at Olympic is not adequately funded. Current efforts are directed towards school children, with presentations on fire prevention done in conjunction with the U.S. Forest Service and Washington State Department of Natural Resources. Private landowners are encouraged to dispose of dead and down fuels from around structures. Burn permits to dispose of natural vegetation are issued to private landowners by park staff. These types of fire activities are coordinated through the park's Fire Management Office, with assistance from the Lake Crescent ranger staff.

RELATIONSHIP TO OTHER PLANNING EFFORTS

The *Lake Crescent Management Plan* is consistent with existing or proposed plans of the National Park Service and other state and federal agencies. Some of the more relevant planning efforts are discussed below.

Olympic National Park Master Plan

The *Master Plan* for Olympic National Park was approved in 1976. The *Master Plan* provides overall guidance and management direction for the park, including a framework for future use and development. The *Master Plan* recommends that development be restricted to the periphery of the park in small areas, generally in their existing location and extent. At Lake Crescent, the plan calls for maintaining campgrounds, expanding lodging/cabins, and providing major interpretive services and equipment rental centers.

Olympic National Park Statement for Management

The park's *Statement for Management* (NPS 1996c) provides an overview of the park's purpose, the nature and significance of its resources, existing conditions, legislative and administrative requirements, management objectives, and an analysis of major issues. A source of information and guidance for the public and for park staff, this document is evaluated every two years and revised as necessary. Although the *Statement for Management* does not prescribe solutions to significant resource protection or visitor use problems, it does identify management issues. Many of the management objectives and issues presented in the *Statement for Management* relate directly to issues and concerns involving management of the Lake Crescent watershed.

Olympic National Park GPRA (Government Performance and Results Act) Strategic Plan

The *Olympic National Park GPRA Strategic Plan* (NPS 1997a) implements performance management principles of accountability for results, mandated under the Government Performance and Results Act of 1993. The park's strategic plan, which complements the *National Park Service Strategic Plan* (NPS

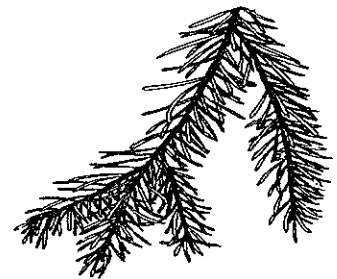
1996d), presents mission goals and long-term goals, assesses the condition of key natural and cultural resources, and describes how human and fiscal resources are allocated to accomplish the park's mandates. The plan has a five-year horizon, is reviewed annually and updated as needed. Many of the long-term goals presented in the plan focus on enhancing resource protection and the visitor experience throughout the park and relate directly to management of the Lake Crescent watershed.

Regional Transportation Planning

Two major transportation plans have targeted the Olympic Peninsula within the last few years, developed in response to the requirements of the State Growth Management Act. These major planning efforts include *Washington's Transportation Plan* (formerly known as the *Statewide Multimodal Transportation Plan*) and the *Peninsula Regional Transportation Plan*. In addition, *The Washington Coastal Corridor: U.S. 101 Corridor Master Plan* profiles the natural and scenic resources of the Olympic Peninsula along U.S. 101. A brief description of each of these plans can be found in the "Affected Environment" section of this document under the heading "Transportation".

U.S. 101 Planning

Concurrent with the NPS planning effort for Lake Crescent, the Washington State Department of Transportation has been engaged in an analysis of land-based motorized and non-motorized (bicycle and pedestrian) access to the Lake Crescent area (WSDOT 1997a). The National Park Service has consulted regularly with state representatives throughout the planning process to ensure that the two plans are compatible in their treatment of land-based access to the area.



Alternatives, Including the Proposed Action

ALTERNATIVES, INCLUDING THE PROPOSED ACTION

In response to the previously identified management issues, a range of practical alternatives for the management of the Lake Crescent area has been developed for consideration. Each alternative identifies specific actions to be taken within each management area as well as actions that are applicable lakewide. The range of alternatives includes the four alternatives presented in the draft plan, with modifications based on public comment received, additional issues raised, and further impact analysis. In addition, another alternative has been added since publication of the draft plan. This alternative, depicted below as "Alternative E," was submitted for consideration during the public comment period by the Friends of Lake Crescent and contains many actions quite similar to those already presented in the range of alternatives in the draft plan. To help the reader understand which actions are the same for each alternative, Table 1, which appears at the end of this section, summarizes the information in matrix form.

ACTIONS COMMON TO ALL NPS-ACTION ALTERNATIVES (ALTERNATIVES A, C, AND D)

The following actions would be implemented under each of the NPS-Action Alternatives:

- **Develop an overall site design for each management area.** Common to all NPS-action alternatives is the need to develop an overall site design for each management area. Development of these site designs would provide a site-specific framework within which proposed improvements would be made. Detailed site planning would enable the park to develop designs for each management area that maximize opportunities for enhancing visitor use of the Lake Crescent area while protecting its natural and cultural resources. Development of the site designs would be contingent upon available funding, as well as the need for specific management areas to be upgraded. (This action is also common to Alternative E.)
- **Develop an overall trail plan for each management area.** The trail plans would identify existing and proposed trails, provide connections between various locations, identify those sections of trail that would be accessible, minimize potential pedestrian/vehicular conflicts, and prevent the proliferation of social trails that damage natural vegetation and cause other resource degradation, such as stream channel erosion. In areas of high foot traffic, clearly marked paths would help prevent further resource damage. (This action is also common to Alternative E.)

MANAGEMENT AREAS

Barnes Point

- **Relocate the picnic area at Bovee's Meadow away from the shoreline.** The shoreline of Lake Crescent is both an attractive site for recreation and an important part of the lake ecosystem. This area calls for close attention to ensure the maintenance of habitat quality and recreational opportunity. Currently, picnic tables are scattered along the shoreline. Their removal would decrease impacts to

shoreline habitat. The orchard is considered a possible location for a picnic area because it provides shade and offers a more centralized location in relation to parking and restroom facilities.

- **Obliterate/revegetate the social trails between Bovee's Meadow and Barnes Creek.** To avoid the loss of understory vegetation in the wooded area between Lake Crescent Lodge and Bovee's Meadow, existing social trails would be obliterated. This action would also protect spawning beds in Barnes Creek.
- **Establish an interpretation/orientation focus at the Storm King Ranger Station; relocate park administrative functions to the NPS-owned Carter House.** The Storm King Ranger Station would become the primary location for interpretation and orientation at Barnes Point. Specific functions and activities based at the ranger station would be identified in an overall interpretive plan to be developed for the Lake Crescent area. Most administrative functions currently operating out of the ranger station would be relocated to the nearby Carter House. Some of these functions would continue to operate from the second floor of the ranger station.

VISITOR SERVICES/FACILITIES

- **Erect attractive entry signs at the eastern and western entrances to Olympic National Park at Lake Crescent.** At the present time, small boundary signs on U.S. 101 are the only indication of entrance to the park at Lake Crescent. An entrance sign would be installed at each entrance location and provide the needed sense of entry into the park.
- **Install park entrance signs along East Beach Road.** Travelers along East Beach Road cross the boundary between private land and NPS land. To provide better visitor orientation, signs would be installed at the park boundary.

WATER RECREATION

- **Prohibit the use of personal watercraft (PWC) on Lake Crescent.** The use of PWC on Lake Crescent has been determined to pose a threat to park resources and values and adversely affects the experience of other park visitors, particularly those seeking a resource-based experience dependent on a national park setting (see Appendix A). Therefore, under all alternatives (including the no-action and FOLC alternatives) the use of PWC would be banned from all parts of Lake Crescent.

MITIGATION MEASURES AND DEVELOPMENT CONSTRAINTS

Mitigation measures and development constraints are specific actions that when implemented, minimize, avoid, or eliminate impacts on resources that would be affected by alternative actions. The National Park Service would fully comply with all applicable laws, regulations, and policies governing resource protection including the Wilderness Act, Endangered Species Act, Clean Water Act, Clean Air Act, Executive Orders 11988 (Floodplain Management) and 11990 (Protection of Wetlands), National Historic Preservation Act, and agency specific guidelines. In instances where resource conditions may have

changed over time or more detailed site design is required, the National Park Service would ensure that the necessary level of environmental compliance has been completed prior to implementing any proposed actions.

The following resource protection strategies would be implemented under each action alternative:

Facility Siting and Design

- New facilities would be located and designed to minimize visual intrusions on the landscape and harmonize with the setting.
- The exact location and design of facilities would require an onsite evaluation of local soil conditions. Preferred sites would possess well-drained soils. Where feasible, locations requiring excessive cut and fill also would be avoided, as would steep slopes, sites that drain directly into sensitive water bodies, and areas subject to subsidence, landslides, rock outcrops, and easily eroded soils.

Resource Protection

Natural Resources

- Areas near construction sites would be revegetated with native species and restored to natural conditions. To the extent practical, disturbed sites would be revegetated with plant materials (e.g., native seeds, transplanted native vegetation) salvaged from areas impacted by construction. To guide restoration efforts, the National Park Service would outline procedures for collecting and propagating native species, salvaging topsoil, site grading and soil preparation, erosion control, vegetation reestablishment, and post-construction monitoring.
- To minimize unnecessary ground disturbance and vegetation impacts resulting from construction, equipment and materials would be stockpiled on previously disturbed sites or within construction footprints. Construction limits would be identified in construction documents and specifications, and fenced or signed in the field to further protect native vegetation and environmentally sensitive areas from disturbance. A construction supervisor would monitor ground and vegetation disturbance to ensure that it is restricted to the minimum area necessary.
- Actions would be taken to ensure that runoff and sediments from project sites do not enter creeks, streams, and other bodies of water. Runoff would be controlled in compliance with federal and state regulations.
- Construction activities would be scheduled to minimize impacts on wildlife behavior and habitat use. Park managers would continue to protect critical wildlife habitat and activity centers from human disturbance by implementing visitor use restrictions and monitoring programs.
- To minimize the potential for adverse effects on sensitive plants or animals, qualified park personnel would survey development sites prior to construction. If a species of concern is found to be inhabiting

a site, the National Park Service would consult with the U.S. Fish and Wildlife Service to determine appropriate mitigation measures to avoid adverse impacts.

- Floodplains and wetlands would be avoided to the greatest extent possible when selecting sites appropriate for development or visitor use. In accordance with NPS guidelines governing floodplain management and wetlands protection (45 FR 35916 and 47 FR 36718), actions would be taken to enhance and restore floodplain and wetland values, to avoid modification or development in floodplains or wetlands when practicable alternatives exist, and to mitigate adverse impacts if a floodplain or wetland would be occupied or modified. For actions resulting in wetlands degradation or loss, an equivalent amount of in-kind mitigation would be accomplished within park boundaries to compensate for lost wetlands acreage, functions, and values.

Cultural Resources

- To protect cultural resources and to comply with the National Historic Preservation Act, all proposed projects would be evaluated to determine the area of potential effect. These areas would be inventoried for significant cultural resources and a determination would be made as to what impact the project would have on the historic qualities of the resources. Through consultation with project designers, the Washington State Historic Preservation Officer and the Advisory Council on Historic Preservation, a plan would be developed to avoid or mitigate impacts. At present, the known areas of concern are the Lake Crescent Lodge Historic District, the Rosemary Inn Historic District, the Storm King Ranger Station, and the Spruce Railroad. To protect cultural resources and to assure timely and cost-effective projects, cultural resource personnel would be part of each design team from the onset.

Visitor Use and Experience

- Whenever possible, the National Park Service would adjust its work schedules, particularly the timing of construction activities, to minimize impacts on park visitors.
- Facility construction would be prioritized and phased wherever possible to minimize disruption of park operations and visitor use.

IMPLEMENTATION PRIORITIES

The purpose of this planning effort is to determine the types of management actions that will enhance resource protection and the visitor experience in the Lake Crescent area, while leaving funding options open. Available funding ultimately will determine when actions proposed under any alternative management strategy would be implemented.

Implementation priorities will be determined within the framework of other park planning documents, including the *Master Plan* (NPS 1976) and *GPRA Strategic Plan* (NPS 1997a). The strategic plan for Olympic National Park establishes long-term goals, as well as an annual work plan which describes yearly goals to be implemented with available funding. Each year the annual work plan will reflect parkwide priorities, including those for the Lake Crescent area.

ALTERNATIVE A: THE PROPOSED ACTION

GENERAL CONCEPT

The proposed action is the alternative that best satisfies the NPS and park mission, as well as the park's management objectives and long-term vision for Lake Crescent. It also recognizes the need to both protect the natural environment and support the recreational interests of visitors. Key elements of this alternative are described below.

MANAGEMENT AREAS

Fairholm

- **Relocate the store and add parking.** The National Park Service recognizes the importance of a store at Fairholm that serves visitors and provides safe access and parking. To this end, a new store and parking area would be built at a site to be selected during the site design process. Access would be available from the North Shore Road. The existing store, gas pumps, and parking would be relocated. The concessioner would have the option of providing food service within the new structure as long as adequate parking is provided.
- **Reconfigure the campground: designate RV sites separate from tent sites; improve pedestrian circulation; revegetate; no RV hook-ups.** Fairholm campground would be reconfigured to address ongoing problems. RV sites and tent sites would be separated and sites would be improved to minimize impacts to vegetation and soils. RV hook-ups would not be provided. Pedestrian circulation would be improved to reduce damage to vegetation. Damaged areas would be revegetated.
- **Remove campsites along the shoreline; revegetate area.** To address degradation of this area, existing campsites along the shoreline would be removed and the sites revegetated. This area would remain closed to camping but may be reopened for limited day use in designated areas.
- **Concession option to provide boat rental service.** The boat rental service would continue operating under the terms of existing and future contracts with Olympic National Park.
- **Concession option to provide bike rental service.** The Washington State Department of Transportation analyzed a variety of alternatives for improving bicycle access through the Lake Crescent area (WSDOT 1997a). The preferred alternative called for improving the Spruce Railroad grade as a safer and more enjoyable route for bicycle traffic than U.S. 101. The proximity of Fairholm to this trail presents an opportunity for establishing a bike rental service, which would be operated by a private concessioner.
- **Retain designated swimming area.** Fairholm provides the only designated swimming area on the west end of the lake, one of three designated areas around the entire lake. The swimming area would be retained, with the site design taking into account the continuation of this use at Fairholm either at its existing location or a new location.

ALTERNATIVES, INCLUDING THE PROPOSED ACTION

- **Retain boat ramp and reconstruct dock.** The existing boat ramp and dock would remain in their present locations, or be relocated based on the site design. Trailer parking would be provided. Siting of new facilities would take into consideration disturbance to shoreline habitat and near-shore boat traffic.
- **Remove underground boat fuel tank and install an above-ground fuel tank.** The existing underground boat fuel tank at the dock is a potential hazard for soil and water contamination and is scheduled to be removed by 1998. However, since there is a need for a boat fueling station on the west end of the lake, an above-ground fuel tank would be installed in its place.

Barnes Point

- **Install an accessible restroom at Bovee's Meadow with water and sewer hook-ups.** Existing restroom facilities at Bovee's Meadow are inadequate to handle current levels of use during the summer months. Bovee's Meadow is close to the sewage treatment plant and potable water infrastructure; new restrooms would be installed with sewer and water connections.
- **Investigate the feasibility of increasing the number of units (rooms) at Lake Crescent Lodge, not to exceed a 10 percent increase in units.** Within the scope of existing or future concession contracts, the feasibility of increasing the number of units by a maximum of 10 percent (a total of six units), may be investigated. Any subsequent construction would be consistent with the historic setting and architectural style of the existing lodge (bungalow/craftsman style) and, to the extent possible, would occupy an existing building footprint.
- **Repair or replace existing dock at Lake Crescent Lodge.** The dock immediately in front of the main lodge building would either be repaired or replaced, affording visitors a greater opportunity to enjoy the lakeshore, as well as to safely access the lodge area from their boats.

Log Cabin

- **Remove the A-frame units and locate replacement units away from the shoreline.** The resort would be redeveloped and provide a range of accommodations including a main lodge and cabins. The redeveloped resort may have up to the same number of units that presently exist, with all new structures sited away from the shoreline.
- **Replace some RV camping with cabins.** To alleviate resource impacts to Log Cabin Creek, campsites bordering the creek would be eliminated. The creek would be restored with native vegetation and access would be delineated with established paths and footbridges across the creek. The RV camping area would be redesigned to allow for the construction of cabins. New cabins would be sited away from the creek.
- **Retain boat ramp and reconstruct dock.** The boat ramp and dock would remain in their present locations, or be relocated based on the site design. Boat trailer parking would be provided. Siting of new facilities would take into consideration disturbance to shoreline habitat and near-shore boat traffic.

- **Concession option to provide boat rental service.** The boat rental service would continue operating under the terms of existing and future contracts with Olympic National Park.
- **Concession option to provide bike rental service.** The Washington State Department of Transportation analyzed a variety of alternatives for improving bicycle access through the Lake Crescent area (WSDOT 1997a). The preferred alternative called for improving the Spruce Railroad grade as a safer and more enjoyable route for bicycle traffic than U.S. 101. The proximity of Log Cabin Resort to this trail presents an opportunity for establishing a bike rental service, which would be operated by a private concessioner.
- **Provide additional parking.** The park anticipates increased use of Log Cabin after redevelopment, with a greater need for parking. The site design process would be used to select a site for additional parking to support lodging and day-use facilities.
- **Provide public boat fueling.** An above-ground fuel tank would be installed to provide a boat fueling station on the east end of the lake.
- **Consider establishing an interpretation/orientation program focusing on Euroamerican settlement in the Lake Crescent area.** Euroamerican history is an integral part of the park's interpretive program. The park would consider expanding interpretation of this subject in the Log Cabin area as funding allows.

La Poel

- **Close the area to overflow camping.** La Poel would not be used for overflow camping when Fairholm campground is full.
- **Investigate the feasibility of establishing tent camping sites.** The park would explore the possibility of establishing tent sites at the west end of La Poel to help offset any loss of campsites at Fairholm and Log Cabin.
- **Retain day use and picnicking away from the creek.** The east end of La Poel would remain a day-use area; existing picnic sites would be relocated away from the creek.

East Beach

- **Install new accessible toilets.** In areas that receive intense use during the summer season, restroom facilities are heavily used and can become a health hazard and detract from the visitor experience. East Beach receives particularly heavy use during the summer and the existing restroom is inadequate to handle this level of use. A new vault or composting toilet(s) would be installed.
- **As a short-term solution to better protect the shoreline, redesign the parking area.** Currently the experience of visitors to East Beach is significantly affected by the proximity of the parking lot to the beach. In several places, car bumpers reach within several feet of the back of the beach, which is quite

narrow. The location of the parking area also poses a pollution threat, as the runoff from the parking lot reaches the lake with limited natural filtering. As a short-term solution, parking would be redesigned and moved away from the beach; handicapped parking would be specifically designated.

- **As a long-term solution to overuse of the area, designate beach parking for visitors with disabilities only and construct an upper parking lot with a trail to the beach.** The park continues to explore ways to make areas accessible for all visitors. The East Beach area poses distinct challenges in this regard as access is steep and the site is narrow. In the long term, the park would explore the feasibility of constructing additional parking uphill from East Beach, with a trail providing access to the beach. Spaces in the lower lot would be reserved for handicapped parking only. Any spaces in excess of those needed for handicapped parking would be eliminated and converted for day use (e.g., additional picnic tables).
- **Investigate the feasibility of building a trail with a scenic overlook on the Fisher parcel.** The park would investigate the feasibility of building a walking trail on the recently acquired Fisher parcel.

North Shore

- **Develop interpretive displays at each end of the Spruce Railroad trail.** The remaining Spruce Railroad grade would be improved to accommodate a full range of non-motorized uses (e.g., hiking, bicycling, horseback riding). Interpretive displays would be developed to serve the users of this trail.
- **Install accessible toilets at each end of the Spruce Railroad trail.** In anticipation of increased use of the Spruce Railroad trail, accessible toilets (vault or composting) would be constructed at the east and west trailheads.
- **Improve the Spruce Railroad grade to the western park boundary as a non-motorized, multi-purpose trail.** In the short term, the Spruce Railroad grade would be leveled and cleared of debris to improve its use by mountain bikers, horseback riders and pedestrians. In the long term, and as it is possible to resolve conflicting uses, the grade would be improved to provide a continuous trail from the Lyre River to the western park boundary for multiple uses, including some or all of the following: pedestrians, wheelchairs, bicycles, horses and rollerblades.
- **Improve the North Shore picnic area.** The park anticipates the increased use of the North Shore picnic area by visitors arriving via foot, bicycle, or boat. In its present condition, the beach area is overgrown with vegetation and few picnic sites are available. Access from the parking lot to the beach would be improved by installing stairs and accessible paths/trails, which would also prevent further erosion of the slope directly above the beach. In the parking area, individual spaces would be delineated with wheel stops. Accessible toilets (vault or composting) would replace existing toilets. Other improvements include interpretive signs and a kiosk showing connections to trails and other destinations.
- **Analyze parking needs and provide for modest expansion at the east and west ends of the Spruce Railroad trail.** As the Spruce Railroad trail is improved and possibly lengthened and

developed for multiple uses, the need for parking must be accommodated. The park would analyze the need for modest expansion of the parking areas at the east and west ends of the Spruce Railroad trail.

VISITOR SERVICES/FACILITIES

- **Establish U.S. 101 within Olympic National Park as a parkway emphasizing the human and natural history of the lake.** U.S. 101 would be developed as the Lake Crescent Parkway and would incorporate elements that are suggestive of the history of Lake Crescent. These may include the installation of rock walls and signs made from local materials. Interpretive displays to educate visitors about the history of the lake, its settlement and its natural history would be developed. Existing pullouts would be maintained.
- **Investigate the feasibility of establishing an information/orientation facility on U.S. 101 east of the intersection with East Beach Road.** To increase the sense of entry into the park, and to provide information to visitors, the National Park Service would investigate the feasibility of establishing an information and orientation center on U.S. 101 east of East Beach Road. This facility would serve several purposes. First, it would orient visitors to the Lake Crescent watershed and Olympic National Park, and interpret the ecology and history of Lake Crescent. Second, it would offer other public agencies and private organizations a means of providing information to visitors regarding recreational opportunities on the Olympic Peninsula.

The concept of an information/orientation facility on U.S. 101 is consistent with *The Washington Coastal Corridor: U.S. 101 Corridor Master Plan*, prepared by the Washington State Department of Transportation. Therefore, to support development of this facility, funding would be sought through the Department of Transportation from the Intermodal Surface Transportation Efficiency Act (ISTEA) fund. Any non-federal matching contribution that may be required as part of the grant submittal could be sought from a combination of state, community, tribal and private sources.

- **Provide additional restroom facilities throughout the Lake Crescent area.** In areas that receive intense use during the summer months, restroom facilities are heavily used and can become a health hazard and detract from the visitor experience. Toilets would be added or replaced at Bovee's Meadow, East Beach, the North Shore picnic area, and both ends of the Spruce Railroad trail. Accessible facilities would be provided at each location, with sewer and water hook-ups at Bovee's Meadow, and either composting or vault toilets at the remaining locations.

TRANSPORTATION/CIRCULATION

- **To improve safety and accommodate bicycles, investigate the feasibility of widening East Beach Road, Piedmont Road, and Lyre River Road to provide four-foot wide paved shoulders.** Though not as hazardous as U.S. 101, East Beach and Piedmont roads are difficult for bike passage because they are narrow and poorly maintained. The park would explore the feasibility, with Clallam County and the Washington State Department of Transportation, of widening these roads to provide four-foot wide paved shoulders. This would improve bicycle circulation around Lake Crescent and facilitate bike travel between Lake Crescent and Joyce along U.S. 112.

- **Support the operation of a commercial educational tour boat; explore the feasibility of adding tour boat stops around the lake.** The *Storm King* tour boat was a positive addition to the recreational and interpretive opportunities at Lake Crescent. The park therefore supports the operation of a commercial tour boat for educational purposes. The park would also explore opportunities to increase the number of stops the tour boat makes around the lake.

WATER RECREATION

- **Allow motorboats (excluding personal watercraft) to operate on the lake.** Motorized boats (excluding personal watercraft) would continue to operate on the lake. A 100-yard no-wake zone would be established from the shoreline, with a 300-yard no-wake zone adjacent to public use areas, the two historic districts, and habitat-sensitive areas.
- **Retain shoreline access for boats.** Barring specific closures necessary to protect resource values or visitor safety, boaters would continue to have access to the shoreline to beach their boats, in addition to using existing docks.
- **Establish a 40-mile per hour (mph) speed limit for motorized watercraft.** The maximum speed limit for motorized watercraft would be 40 mph, lakewide. This speed is considered a safe and reasonable limit for all types of boating recreation. National Park Service watercraft would be excluded from this restriction in order to carry out law enforcement and rescue activities.
- **Investigate the use of a citizens' auxiliary to assist Olympic National Park in patrolling the lake.** The National Park Service would investigate the use of a citizens' auxiliary, which would likely be managed under the Volunteers-in-Park program. Possible duties to be performed by these volunteers could include assisting park rangers in providing information to the boating public, conducting boat inspections, assisting with water rescue incidents, and helping to provide a positive approach to boating safety on Lake Crescent.

ALTERNATIVE B: NO ACTION

GENERAL CONCEPT

The no-action alternative represents no change from present management direction. This alternative therefore represents the current situation at Lake Crescent. Under the no-action alternative, the park's existing management activities, including those for water recreation, would be continued. Existing roads, trails, and visitor facilities would be maintained to support current levels of activity, with limited improvements made only on an as-needed basis and as funding becomes available. Required improvements for safety, sanitation, and wheelchair accessibility would also be undertaken as funding allowed.

Except for a ban on the use of PWC on Lake Crescent, recreational use of the lake would not be addressed beyond the current guidelines established in the park's *Water Safety Plan* (NPS 1994). All other motorboats would be permitted anywhere on the lake with the exception of designated swimming areas and the mouth of the Lyre River. The 50-yard no-wake zone established by the *Water Safety Plan* would continue to be in effect.

MANAGEMENT AREAS

Fairholm

- **Retain the existing store.** The existing store would continue operation with the National Park Service not requiring improvements to the exterior of the building (the concessioner may improve the building's exterior at his discretion). The parking configuration and existing access off of U.S. 101 would remain.
- **Concession option to operate a food service such as a restaurant or snack bar.** The existing snack bar in the Fairholm store would continue operation.
- **Concession option to provide boat rental service.** The boat rental service would continue operating under the terms of existing and future contracts with Olympic National Park.
- **Retain existing swimming area.** As the only designated swimming area on the west end of Lake Crescent, the existing swimming area would be retained at its present location.
- **Retain boat ramp and dock.** The existing boat ramp and dock would remain in their current locations to provide access to boaters.
- **Remove underground boat fuel tank and install an above-ground fuel tank.** The existing underground boat fuel tank at the dock is a potential hazard for soil and water contamination and is scheduled to be removed by 1998. However, since there is a need for a boat fueling station on the west end of the lake, an above-ground fuel tank would be installed in its place.

Barnes Point

No actions beyond existing management practices are proposed.

Log Cabin

- **Retain boat ramp and dock.** The existing boat ramp and dock would remain in their current locations to provide access to boaters.
- **Reserve the lakefront for day use.** Use of the lakefront would continue.
- **Concession option to provide boat rental service.** The boat rental service would continue operating under the terms of existing and future contracts with Olympic National Park.

La Poel

- **Retain day use and picnicking.** Since closure of the campground, La Poel has been used primarily as a picnic area; this use would continue.

East Beach

No actions beyond existing management practices are proposed.

North Shore

- **Install accessible toilets at both ends of the Spruce Railroad trail.** In anticipation of increased use of the Spruce Railroad trail, accessible toilets (vault or composting) would be constructed at the east and west trailheads.

TRANSPORTATION/CIRCULATION

- **Support the operation of a commercial educational tour boat.** The *Storm King* tour boat was a positive addition to the recreational and interpretive opportunities at Lake Crescent. The park therefore supports the operation of a commercial tour boat for educational purposes.

WATER RECREATION

- **Allow the use of motorboats, excluding personal watercraft.** Motorized boats, with the exception of personal watercraft, would continue to operate on the lake with no restrictions beyond those required by the park's *Water Safety Plan* (NPS 1994).

- **Retain shoreline access for boats.** Barring specific closures necessary to protect resource values or visitor safety, boaters would continue to have access to the shoreline to beach their boats, in addition to using existing docks.

ALTERNATIVE C

GENERAL CONCEPT

This alternative emphasizes increased recreational opportunities for visitors, while continuing to protect natural and cultural resources. Compared to other alternatives, visitors would have a broader range of options for recreation at Lake Crescent. Minimal restrictions for motorized water recreation would be imposed, primarily to exclude their use where conflicts with swimmers would occur and where habitat for endangered, threatened, and sensitive species may be impacted.

MANAGEMENT AREAS

Fairholm

- **Retain the existing store operation but improve its appearance and add parking.** While the park would support the continued presence of a store at Fairholm, the condition and appearance of the facility is a concern. Under this alternative, the park would require improvements to the exterior of the existing structure appropriate in keeping with the historic setting and character of the Lake Crescent area. Additional parking would also be required to reduce congestion immediately adjacent to U.S. 101.
- **Concession option to operate food service such as a restaurant or snack bar.** This operation may be located within the existing store or built as a separate structure. In either case, adequate parking would be required to accommodate the demand generated by this use.
- **Reconfigure the campground: provide separate loops for RV sites and tent sites; improve pedestrian circulation; revegetate; provide RV hook-ups.** Reconfiguration of the campground would address ongoing problems of overuse. Separate loops would be provided for RV sites and tent sites. RV hookups would be provided. Pedestrian circulation would be improved to minimize damage to vegetation, and damaged areas would be revegetated with native plants.
- **Concession option to provide boat rental service.** The boat rental service would continue operating under the terms of existing and future contracts with Olympic National Park.
- **Concession option to provide bike rental service.** The Washington State Department of Transportation analyzed a variety of alternatives for improving bicycle access through the Lake Crescent area (WSDOT 1997a). The preferred alternative called for improving the Spruce Railroad grade as a safer and more enjoyable route for bicycle traffic than U.S. 101. The proximity of Fairholm to this trail presents an opportunity for establishing a bike rental service, which would be operated by a private concessioner.
- **Designate a picnic area.** A picnic area would be designated at Fairholm as per the site design.
- **Retain designated swimming area.** Fairholm provides the only designated swimming area on the west end of the lake, one of three areas around the entire lake. The swimming area would be retained,

with the site design taking into account the continuation of this use at Fairholm either at its existing location or at a new location.

- **Retain boat ramp and reconstruct dock.** The existing boat ramp and dock would remain in their present locations, or be relocated based on the site design. Trailer parking would be provided. Siting of new facilities would take into consideration disturbance to shoreline habitat and near-shore boat traffic.
- **Remove underground boat fuel tank and install an above-ground fuel tank.** The existing underground boat fuel tank at the dock is a potential hazard for soil and water contamination and is scheduled to be removed by 1998. However, since there is a need for a boat fueling station on the west end of the lake, an above-ground fuel tank would be installed in its place.

Barnes Point

- **Concession option to increase the number of units at Lake Crescent Lodge, not to exceed a 10 percent increase in existing units.** The concessioner would have an option for limited lodge expansion, increasing the number of units by a maximum of 10 percent (a total of six units). Improvements to or replacement of existing buildings or construction of new buildings would be consistent with the historic setting and the architectural style of the existing lodge (bungalow/craftsman style) and, to the extent possible, would occupy an existing building footprint.
- **Construct a multi-use facility at Lake Crescent Lodge.** The Lake Crescent Lodge concessioner has proposed the construction of a "multi-use" facility. This facility would be used specifically for privately sponsored conferences during the shoulder seasons (spring/fall) and would accommodate up to 100 individuals. The facility would also be available for other functions on a reservation basis. Additional parking is proposed to accommodate increased demand.
- **Construct a second, small boat dock at the existing boat ramp.** Currently, the boat ramp at the Storm King boat launch is supplemented by a single dock. When a tour boat is operating, one side of the dock is used by the tour boat for boarding passengers, with the other side available for all other boats. To ease congestion in the area, a second boat dock is proposed on the opposite side of the ramp.
- **Install an accessible restroom at Bovee's Meadow with water and sewer hook-ups.** Existing restroom facilities at Bovee's Meadow are inadequate to handle current levels of use during the summer months. Given the proximity of Bovee's Meadow to the sewage treatment plant and potable water infrastructure, new restrooms would be installed with sewer and water connections.
- **Establish a buoyed swimming area at Bovee's Meadow.** Bovee's Meadow receives significant pressure from visitors engaged in a variety of recreational pursuits, including swimming, boating, jet skiing, and picnicking. At times of highest activity the area becomes hazardous for use by swimmers, even those who stay landward of the existing buoys that mark the no-wake zone. To address this situation, a buoyed swimming area would be established.
- **Analyze parking needs and expansion opportunities near the Storm King Ranger Station.** To address parking shortages during peak use periods, the park would analyze the need and options for

redesigning or expanding existing car and boat trailer parking lots. This analysis would take into account the historic landscape, existing stands of old-growth and/or specimen trees, and the treatment of stormwater runoff.

Log Cabin

- **Retain boat ramp and reconstruct dock.** The boat ramp and dock would remain in their present locations, or be relocated based on the site design. Boat trailer parking would be provided. Siting of new facilities would take into consideration disturbance to shoreline habitat and near-shore boat traffic.
- **Reserve the lakefront for day use.** Day-use recreation, including swimming, picnicking, and other types of day-use activities would be permitted. Day-use areas would be designated according to the overall site design for the resort. These areas would be sited in a manner that minimizes the disturbance of sensitive areas (e.g., Log Cabin Creek, riparian zones, shoreline habitats) by visitors. The swimming area would be buoyed to minimize conflicts between swimmers and boat traffic.
- **Concession option to provide boat rental service.** The boat rental service would continue operating under the terms of existing and future contracts with Olympic National Park.
- **Concession option to provide bike rental service.** The Washington State Department of Transportation analyzed a variety of alternatives for improving bicycle access through the Lake Crescent area (WSDOT 1997a). The preferred alternative called for improving the Spruce Railroad grade as a safer and more enjoyable route for bicycle traffic than U.S. 101. The proximity of Log Cabin Resort to this trail presents an opportunity for establishing a bike rental service, which would be operated by a private concessioner.
- **Provide additional parking.** The park anticipates increased use of Log Cabin after redevelopment, with a greater need for parking. The site design process would be used to select a site for additional parking to support lodging and day-use facilities.
- **Provide public boat fueling.** An above-ground fuel tank would be installed to provide a boat fueling station on the east end of the lake.

La Poel

- **Establish a tent camping area with 10-12 sites.** La Poel would be reopened for tent camping to relieve some of the pressure for campsites at Fairholm. Existing sites would be evaluated for needed improvements such as level tent pads, picnic tables, and fire pits. In addition, social trails throughout the campground would be closed to prevent further erosion and damage to vegetation.
- **Improve beach access through selective removal of vegetation from the shoreline.** To increase the area available to visitors along the La Poel shoreline, the park would remove some vegetation that currently shades the beach and prevents access.

- **Construct a boat ramp and dock.** Currently, boaters are able to launch their boats at Fairholm, Barnes Point, and Log Cabin. To better accommodate the demand for launch sites and to distribute launching around the lake, a boat ramp and dock would be constructed at La Poel. Siting of these facilities would take into consideration potential disturbance to shoreline habitat (including the mouth of La Poel Creek) and near-shore boat traffic.

East Beach

- **Install new accessible toilets.** In areas that receive intense use during the summer season, restroom facilities are heavily used and can become a health hazard and detract from the visitor experience. East Beach receives particularly heavy use during the summer and the existing restroom is inadequate to handle this level of use. A new vault or composting toilet(s) would be installed.
- **As a short-term solution to better protect the shoreline, redesign the parking area.** Currently the experience of visitors to East Beach is significantly affected by the proximity of the parking lot to the beach. In several places, car bumpers reach within several feet of the back of the beach, which is quite narrow. The proximity of the parking area to the water also poses a pollution threat, as the runoff from the parking lot reaches the lake with limited natural filtering. As a short-term solution, parking would be redesigned and moved away from the beach; handicapped parking would be specifically designated.
- **As a long-term solution to overuse of the area, designate beach parking for visitors with disabilities only and construct an upper parking lot with a trail to the beach.** The park continues to explore ways to make areas accessible for all visitors. The East Beach area poses distinct challenges in this regard as access is steep and the site is narrow. In the long term, the park would explore the feasibility of constructing additional parking uphill from East Beach, with a trail providing access to the beach. Spaces in the lower lot would be reserved for handicapped parking only. Any spaces in excess of those needed for handicapped parking would be eliminated and converted for day use (e.g., additional picnic tables).
- **Investigate the feasibility of building a trail with a scenic overlook on the Fisher parcel.** The park would investigate the feasibility of building a walking trail on the recently acquired Fisher parcel.

North Shore

- **Develop an interpretive kiosk along the Spruce Railroad trail.** The Spruce Railroad grade would be improved to accommodate a full range of non-motorized uses (e.g., hiking, bicycling, horseback riding). An interpretive kiosk would be developed to serve the users of this trail.
- **Install accessible toilets at both ends of the Spruce Railroad trail.** In anticipation of increased use of the Spruce Railroad trail, accessible toilets (vault or composting) would be constructed at the east and west trailheads.
- **Develop backcountry walk- or bike-in campsites.** A limited number of backcountry camping sites with access from the Spruce Railroad trail would be developed.

ALTERNATIVES, INCLUDING THE PROPOSED ACTION

- **Improve the Spruce Railroad grade to the western park boundary as a non-motorized, multi-purpose trail.** In the short term, the Spruce Railroad grade would be leveled and cleared of debris to improve its use by mountain bikers, horseback riders and pedestrians. In the long term, and as it is possible, the grade would be improved to provide a continuous trail from the Lyre River to the western park boundary for multiple uses. Some or all of the following uses would be accommodated: pedestrians, wheelchairs, bicycles, horses and rollerblades.
- **Improve the North Shore picnic area.** The park anticipates the increased use of the North Shore picnic area by visitors arriving via foot, bicycle, or boat. In its present condition, the beach area is overgrown with vegetation and few picnic sites are available. Access from the parking lot to the beach would be improved by installing stairs and accessible paths/trails, which would also prevent further erosion of the slope directly above the beach. In the parking area, individual spaces would be delineated with wheel stops. Accessible toilets (vault or composting) would replace existing toilets. Other improvements include interpretive signs and a kiosk showing connections to trails and other destinations.
- **Analyze parking needs and provide for modest expansion at the east and west ends of the Spruce Railroad trail.** As the Spruce Railroad trail is improved and possibly lengthened and developed for multiple uses, the need for parking must be accommodated. The park would analyze the need for modest expansion of the parking areas at the east and west ends of the Spruce Railroad trail.
- **Gate the North Shore Road past the picnic area.** Several private inholdings are located east of the North Shore picnic area. To eliminate nonresident traffic past the picnic area, a gate would be installed just beyond the entrance to the picnic area. Beyond this point vehicular access would be available only to park staff and private landowners and their guests.

VISITOR SERVICES/FACILITIES

- **Establish U.S. 101 within Olympic National Park as a parkway emphasizing the human and natural history of the lake.** U.S. 101 would be developed as the Lake Crescent Parkway and would incorporate elements that are suggestive of the history of Lake Crescent. These may include the installation of rock walls and signs made from local materials. Interpretive displays to educate visitors about the history of the lake, its settlement and its natural history would be developed. Existing pullouts would be maintained.
- **Investigate the feasibility of establishing an information/orientation facility on U.S. 101 east of the intersection with East Beach Road.** To increase the sense of entry into the park, and to provide information to visitors, the National Park Service would investigate the feasibility of establishing an information and orientation center on U.S. 101 east of East Beach Road. This facility would serve several purposes. First, it would orient visitors to the Lake Crescent watershed and Olympic National Park, and interpret the ecology and history of Lake Crescent. Second, it would offer other public agencies and private organizations a means of providing information to visitors regarding recreational opportunities on the Olympic Peninsula.

The concept of an information/orientation facility on U.S. 101 is consistent with the *The Washington Coastal Corridor: U.S. 101 Corridor Master Plan*, prepared by the Washington State Department of Transportation. Therefore, to support development of this facility, funding would be sought through the Department of Transportation from the Intermodal Surface Transportation Efficiency Act (ISTEA) fund. Any non-federal matching contribution that may be required as part of the grant submittal could be sought from a combination of state, community, tribal and private sources.

- **Provide additional restroom facilities throughout the Lake Crescent area.** In areas that receive intense use during the summer months, restroom facilities are heavily used and can become a health hazard and detract from the visitor experience. Additional restroom facilities would be added at Bovee's Meadow, East Beach, the North Shore picnic area, and both ends of the Spruce Railroad trail. Accessible facilities would be provided at each location, with sewer and water hook-ups at Bovee's Meadow, and either composting or vault toilets at the remaining locations.

TRANSPORTATION/CIRCULATION

- **To improve safety and accommodate bicycles, investigate the feasibility of widening East Beach Road, Piedmont Road, and Lyre River Road to provide four-foot wide paved shoulders.** Though not as hazardous as U.S. 101, East Beach and Piedmont roads are difficult for bike passage because they are narrow and poorly maintained. The park would explore the feasibility, with Clallam County and the Washington State Department of Transportation, of widening these roads to provide four-foot wide paved shoulders. This would improve bicycle circulation around Lake Crescent and facilitate bike travel between Lake Crescent and Joyce along U.S. 112.
- **Support the operation of a commercial educational tour boat; explore the feasibility of adding tour boat stops around the lake.** The *Storm King* tour boat was a positive addition to the recreational and interpretive opportunities at Lake Crescent. The park therefore supports the operation of a commercial tour boat for educational purposes. The park would also explore opportunities to increase the number of stops the tour boat makes around the lake.

WATER RECREATION

- **Allow motorboats (excluding personal watercraft) to operate on the lake.** Motorized boats (excluding personal watercraft) would continue to operate on the lake. A 100-yard no-wake zone would be established from the shoreline; no speed limits or maximum horsepower would be established.
- **Retain shoreline access for boats.** Barring specific closures necessary to protect resource values or visitor safety, boaters would continue to have access to the shoreline to beach their boats, in addition to using existing docks.

ALTERNATIVE D

GENERAL CONCEPT

This alternative emphasizes the protection of the watershed's natural resources while continuing to support recreational use of the area. Greater limits would be placed on motorized water recreation. Development of new facilities would be somewhat limited compared to other alternatives, and some existing uses would be eliminated. The restoration of natural areas that have been degraded through overuse is emphasized.

MANAGEMENT AREAS

Fairholm

- **Remove store and restore site to natural conditions.** The existing store and associated parking area would be removed and the site restored to natural conditions.
- **Reconfigure the campground: improve pedestrian circulation; revegetate; no RVs.** To address the impacts of overuse, the campground would be closed to RVs and reconfigured. A small number of walk-in sites would be considered. Pedestrian circulation would be improved to minimize damage to vegetation. Damaged areas, including social trails, former RV pads, and heavily damaged tent camping areas would be revegetated.
- **Remove campsites along the shoreline; revegetate area.** To address degradation of this area, existing campsites along the shoreline would be removed and the sites revegetated. This area would remain closed to camping but may be reopened for limited day use in designated areas.
- **Remove designated swimming area.** The existing buoyed swimming area would be eliminated.
- **Remove boat ramp and dock.** The existing boat ramp and dock would be removed from their present location.
- **Remove underground fuel tank.** The existing underground boat fuel tank at the dock is a potential hazard for soil and water contamination and is scheduled to be removed by 1998. Once the tank is removed, boat fuel would no longer be available at this location.

Barnes Point

- **Close the beach at Bovee's Meadow to day use and revegetate the area.** The beach would be closed to prevent further damage to shoreline vegetation resulting from heavy use. Swimming would not be allowed.

Log Cabin

- **Remove the A-frame units and locate replacement units away from the shoreline.** The resort would be redeveloped and provide a range of accommodations including a main lodge and cabins. The redeveloped resort may have up to the same number of units that presently exist, with all new structures sited away from the shoreline.
- **Close the RV camping area and revegetate.** The RV camping area would be closed and revegetated with native vegetation. The riparian area of Log Cabin Creek would be restored and access would be limited and delineated with established paths and footbridges across the creek.
- **Remove boat ramp and dock.** The existing boat ramp and dock would be removed from their present location.

La Poel

- **Close the area to overflow camping; remove existing campsites; revegetate area.** La Poel would not be used for overflow camping when Fairholm campground is full. Existing campsites would be revegetated with native plants.
- **Retain day use and picnicking away from the creek.** La Poel would be used for day use only and access to the area would be limited to that necessary to support day use. Access to the creek would be limited.

East Beach

- **Limit the use of East Beach and revegetate.** To reduce the impacts of heavy use, East Beach would be closed and revegetated.

North Shore

No actions beyond existing management practices are proposed.

VISITOR SERVICES/FACILITIES

With the exception of actions common to all NPS-action alternatives, no actions beyond existing management practices are proposed.

TRANSPORTATION/CIRCULATION

No actions beyond existing management practices are proposed.

WATER RECREATION

- **Allow motorboats, excluding personal watercraft.** Motorized boats would continue to operate on Lake Crescent. The use of personal watercraft would be prohibited on the entire lake. A 100-yard no-wake zone would be established from the shoreline, with a 300-yard no-wake zone adjacent to public use areas, the two historic districts, and habitat-sensitive areas.
- **Establish a 35-mile per hour (mph) speed limit for motorized watercraft.** The maximum speed limit for motorized watercraft would be 35 mph, lakewide. This speed is considered a safe and reasonable limit for all types of boating recreation. National Park Service watercraft would be excluded from this restriction in order to carry out law enforcement and rescue activities.
- **Establish a 25-horsepower (hp) limit for recreational boats.** The maximum motor size for boats on the lake would be 25 hp.

ALTERNATIVE E: SUBMITTED BY THE FRIENDS OF LAKE CRESCENT

The following alternative, which contains actions quite similar to those already presented in the range of alternatives in the draft plan, was submitted by the Friends of Lake Crescent, a nonprofit organization of over 500 concerned citizens, property owners, and recreational users of the lake. A complete description of this new alternative is included in the comment letter submitted by the Friends of Lake Crescent and appears in the "Comments and Responses" section of this document.

MANAGEMENT AREAS

Fairholm

- **Develop an overall site design to include an overall trail plan; improve Fairholm management area.** The Friends of Lake Crescent believe the importance of and need for an overall site plan and sense of direction is obvious and needs little justification. It must include a clear statement of the long-term objectives and considerations. Any adverse effects of localized areas of more concentrated use within the overall lake (watershed) area can be at least partially mitigated by improvement in the Fairholm management area.
- **Construct new store at new site west of existing site with access from North Shore Road and U.S. 101; construct appropriate parking at new store to accommodate expected use and convert current parking area to a roadside turnout (complete with interpretive display). Generally, make no change in current operation (general store, snack bar, vehicle and boat fuel), but expand the scope of food service to include a restaurant.** The Friends of Lake Crescent believe that construction of a new store in a better location will mitigate traffic problems along U.S. 101, allow for an expanded parking area, and provide an opportunity to expand the scope of food service. Sufficient parking must be provided to reduce the safety hazard to an acceptable level. Enhanced food service will better serve visitors, campers, and local residents. An entry from U.S. 101 in addition to one from the Camp David Jr. Road is essential for the economic well-being of the store operation.
- **Reconfigure campground designating RV sites and tent sites on separate road loops and provide RV hook-ups.** The Friends of Lake Crescent believe strongly that facilities that allow safe, environmentally benign camping accommodations for recreational vehicles of all descriptions are essential to allow the general public, particularly older Americans and younger families with children traveling on a budget, an opportunity to enjoy and experience Lake Crescent. Safety considerations cause the Friends of Lake Crescent to support separate loops within the campground.
- **Existing boat rental service to continue; offer bike rental service if bike trail is built; designate a new picnic/day-use site adjacent to current swimming area; retain a designated swimming area; improve boat ramp and dock to Barnes Point-like standard.** The Friends of Lake Crescent wish to see the continued use of this long established area for recreation, improving the boat launch facilities in an effort to more evenly distribute use of the lake's surface and minimize areas of concentrated human activity. The swimming area, boat rental, and bicycle rental will round out the recreational opportunities for visitors and are in keeping with the historic use of this resort.

- **Improve existing trails, construct new trails as appropriate per overall trail plan; obliterate social trails and revegetate as appropriate.** The Friends of Lake Crescent recognize and support the need to preserve the understory and natural vegetation in this management area consistent with planned visitor use. Trails should be retained, constructed, and maintained with the purpose of complementing the overall site plan and intended traffic flow. Campground roads must be maintained so the environment is protected. Campsites and recreational vehicle sites must be improved and maintained to minimize damage to the environment from visitor use. Obliteration of social trails must be carefully considered since their existence results from overwhelming visitor use patterns. Careful consideration must be given to improving and converting them into official park-sanctioned trails. A water hydrant system should be installed for fire protection.
- **Convert current store parking area into a scenic overlook with interpretive display.** The Friends of Lake Crescent believe that the current store parking site with an appropriate interpretive display covering early use of the lake by Clallam County citizens, the Clallam County ferry system, and original resorts along this part of the lake would be of immense benefit in educating visitors about lake use.
- **Allow camping along the shoreline; revegetate as appropriate; improve campsites to prevent future degradation; replace existing underground boat fuel tank with a replacement above-ground fuel tank; continue to sell vehicle and boat fuel.** The Friends of Lake Crescent believe that camping along the lakeshore is an unforgettable experience, one too valuable to visitors in experiencing the ambiance of Lake Crescent to be eliminated. Campsites can be improved and appropriate areas revegetated without prohibiting camping along the shoreline. The current park policy of "pick it up; pack it out" is working well. Careful planning and maintenance can overcome current problems in the Fairholm campground.

Barnes Point

- **Develop an overall site design; develop an overall trail plan; keep park administration (ranger station) in the current Storm King Ranger Station; make only modest improvements at Barnes Point management area.** The Friends of Lake Crescent believe that the importance of and need for an overall plan and sense of direction is obvious and needs little justification. It must include a clear statement of the long-term objectives and considerations for this management area.
- **Make no changes in current configuration of Lake Crescent Lodge; allow concessioner to increase the number of units up to ten percent over the current total after a careful study of the need and local environmental impact of the required clear-cutting; new construction must be consistent with historic setting and architectural style of existing lodge and not resemble a commercial motel; do not construct a new multi-use facility at Lake Crescent Lodge with a capacity of 100 persons to cater private conferences or other functions; repair existing dock or construct new dock at Lake Crescent Lodge (dock would provide temporary moorage for tour boat as well as guest boats).** The Friends of Lake Crescent wish to see Lake Crescent Lodge remain as it is today (and as it was more or less). Construction of the multi-use facility is not needed and emphatically not recommended. Additional clearing of the forest is not desirable and would be required for construction and parking. Clearing is also contrary to NEPA (National Environmental

Policy Act). Additional study is required before any additional visitor overnight facilities are considered at the lodge. The Friends of Lake Crescent believe that we should invest precious public funds in accommodations for working Americans, not in luxury accommodations for the wealthy. If, in the future, should a valid need be determined to exist and is sufficiently compelling to justify destruction of the forest, then additional facilities built must be designed to conform to the appearance of the original guest cabins. The dock must be repaired or replaced with one capable of safely mooring two or four boats and also providing moorage for the anticipated tour boat. This would increase patronage of the dining room and benefit guests of the lodge. It would also be in keeping with the historical character of the site, one of the original Clallam County ferry piers.

- **Construct an additional small boat dock adjacent to existing dock and launch ramp; make only minor changes to Bovee's Meadow day-use site by constructing new or additional restroom facilities at Bovee's Meadow with connections to park water and sewer systems (flush toilets); keep the old orchard area as it is, unimproved and a feeding place for deer; do not establish a buoyed swimming area at Bovee's Meadow.** The now non-existent tour boat, *Storm King*, used half of the existing dock, causing congestion and queuing in the launch area. Assuming the tour boat will be replaced, the Friends of Lake Crescent believe an additional small pier is needed to relieve congestion and increase safety in the launch area. Establishment of a buoyed swimming area at Bovee's Meadow is not desirable since the bulk of the users are engaged in motorized water activity (tubing, water skiing, etc.). The cove is narrow and a buoyed swimming area with its expanded no-wake zone would create increased congestion and safety hazards by decreasing the available area of calm water for motorized boat use. It also detracts from the "full use and enjoyment" of their land by the many private property owners in Barnes Cove. If, after careful study, additional buoyed swimming areas beyond those at Fairholm, Log Cabin and East Beach are proven desirable, the cove at Rosemary Lodge should be carefully considered for this purpose. It is protected, relatively shallow and partially encircled by the curving sandy beach. It is also not a site used for water skiing or tubing. The presence of the grassy area and existing covered picnic area make this location particularly attractive. No conflict with motorized watercraft should occur. The cove is also protected from the west wind and the cleared area surrounding this sunny location makes it an ideal swimming area. Use for swimming is compatible with its historic use and has the benefit of diverting some of the recreational users away from Bovee's Meadow allowing vegetation there to more readily restore itself.
- **Construct additional parking for boat trailers and tow vehicles by expanding existing facility (do not design for peak use, rather an amount less than that); obliterate some social trails between Bovee's Meadow and Barnes Creek and convert these to park-approved status; study visitor traffic patterns to determine which social trails to obliterate and which to recognize.** The Friends of Lake Crescent acknowledge that while it is true that on a few busy summer holidays and weekends the parking area for boat trailers and tow vehicles is over crowded, one must keep in mind it is only for a few days. Designing for absolute maximum use is a luxury only the federal government could previously afford. No one in commercial practice does this. We can no longer afford this. Some modest increase is appropriate and since the area is already cleared of trees, increasing the number of spaces by 50% or less would not have an adverse environmental impact. Obliteration of social trails must be carefully considered since their existence results from overwhelming visitor use patterns. Careful consideration must be given to improving and converting them into official park-sanctioned trails.

- **Make no changes in current use of Storm King Ranger Station; keep Storm King Ranger Station the primary location for interpretation/orientation at Barnes Point.** The Friends of Lake Crescent believe that the Storm King Ranger Station is perfectly satisfactory for both ranger activities and as the focal point for interpretation/orientation activities. What could be more appropriate than keeping district administration in the Storm King Ranger Station (i.e., rangers in the ranger station). New construction is not necessary as adequate work areas exist considering the year-round average staffing. The interpretive staff uses most of the lower floor currently and since their work site is or should be out with the public, this is sufficient. We want them out with the public, not in some office somewhere. As a matter of fact, this part of the station is not used a significant part of the year. A study of the numbers of employees actually required (manpower survey) is needed before any discussion of expansion occurs. Again, we should not try to design for absolute peak use. This may have been common in the past but assuredly is not a sound practice now in this era of shrinking budgets.
- **Construct an above-ground fuel tank and offer boat fuel at launch ramp.** The Friends of Lake Crescent believe that while this action may be controversial, the fact remains that an above-ground fuel tank already exists adjacent to the launch point. Sales to the general public would provide additional revenue for Olympic National Park and better utilize the existing facility without any increase in environmental hazard. Such a fuel point could be operated as a concession.

Log Cabin

- **Develop an overall site design to include an overall trail plan; make only modest improvements to Log Cabin management area.** The Friends of Lake Crescent believe the importance of and need for an overall plan and sense of direction is obvious and needs little justification. It must include a clear statement of the long-term objectives and considerations.
- **Make no changes to Log Cabin Resort main lodge; keep the current cabins to include the A-frame cabins; keep the current RV park and RV hook-ups.** The Friends of Lake Crescent strongly believe facilities that allow safe, environmentally benign camping accommodations for recreational vehicles of all descriptions are essential to allow the general public, particularly older Americans and younger families with children traveling on a budget, an opportunity to enjoy and experience Lake Crescent. The current lodge is adequate and the mix of cabins gives insight into the various historical periods of lake use. The older cabins were barged from the former Bonnie Brae resort and have considerable historical significance. They must be preserved.
- **Improve current boat ramp and dock; reserve lakefront in front of the current main lodge for day use by visitors; retain current designated swimming area; allow concession to offer boat and bike rental.** The Friends of Lake Crescent wish to see the continued use of this long-established area for recreation, improving the boat launch facilities in an effort to more evenly distribute use of the lake's surface and minimize areas of concentrated human activity. The swimming area, boat rental, and bicycle rental will round out the recreational opportunities for visitors and are in keeping with the historic use of this resort. The area in front of the lodge with its buoyed swimming area is already the day-use site and should remain so. Part of the existing dock system is badly in need of upgrade. The launch ramp needs contouring and upgrading to better serve the needs of boaters with trailers.

- **Generally retain existing road and parking facilities without change; construct additional parking on south side of East Beach Road only (users would walk to resort and beach).** While it is true that additional parking is needed, the Friends of Lake Crescent believe that locating additional parking on the opposite side of the East Beach Road, a heavily traveled road in summer, would create a safety hazard with potentially tragic consequences. There is ample room behind the upper row of cabins to construct a small parking lot from which visitors could safely walk to the lodge and beach without crossing the East Beach Road.
- **Consider establishing an interpretation/orientation program focusing on Euroamerican settlement that occurred in the area of Lake Crescent.** The Friends of Lake Crescent believe that most of the interpretation/orientation programs omit the historical significance of the Euroamerican settlers who built communities, started businesses, and raised families helping a young nation grow into a world power the United States of America is today.
- **Install an above-ground fuel tank and sell boat fuel.** The Friends of Lake Crescent note that Olympic National Park promised to maintain this boat fuel facility. It has been allowed to be discontinued. This facility is essential to serve visitors' and residents' needs in an environmentally sound manner.

La Poel

- **Develop an overall site plan for La Poel management area; develop an overall trail plan for La Poel management area; make improvements at La Poel management area.** The Friends of Lake Crescent believe the importance of and need for an overall plan and sense of direction is obvious and needs little justification. It must include a clear statement of the long-term objectives and considerations. Any adverse effects of localized areas of more concentrated use within the overall lake (watershed) area can be at least partially mitigated by improvement in the La Poel management area. An archaeological survey to identify and protect Civilian Conservation Corps (CCC) artifacts should also be planned for. The plan should have as its objective the revival of this historic and picturesque camping area.
- **Maintain the campground, dedicating approximately half of the current sites for tent camping, and approximately half of the current sites for day use, improving both as necessary; ensure a number of the day-use spaces are placed in front of the dedicated swimming area; conduct a study to determine the need for a seasonal, trailer-mounted snack bar concession to be operated only during the summer season (operation may be determined to only be appropriate on weekends and holidays).** La Poel has historically been an area associated with recreation and reconstruction. Originally a resort, it was converted for use as a CCC camp. Later it became one of the important camping and day-use sites around the lake. The Friends of Lake Crescent believe that re-establishing La Poel as a campground for overnight tent camping and day use is in keeping with historic considerations. The comfort station and associated sewage and water supply systems already exist. If, as Olympic National Park says, visitation will increase, it is prudent to prepare for it by retaining campsites, not removing them.

- **Construct a boat ramp and dock to a standard similar to that of Barnes Point launch area; improve beach access through selective removal of vegetation from shoreline; designate a swimming area.** The Friends of Lake Crescent believe that water recreation is one of the main attractions of Lake Crescent. Re-establishment of boat launch facilities will help mitigate any adverse effects from concentrated recreational use of the lake in a few areas that Olympic National Park is so concerned about. Since the park was established for the use and enjoyment of the public, it makes sense to plan for and see that this is possible. A formal, buoyed swimming area will provide a margin of safety not now available especially in the absence of lifeguards.
- **Improve current trails as per overall trail plan while selectively obliterating social trails.** The Friends of Lake Crescent believe that as part of the general improvement of this fine campground, improvement of the road and trail network is required as well as improvement of the campsites. Improvement and formalization of these features protect the vegetation and environment. Care must be taken to carefully evaluate the social trails before attempting to obliterate them for they exist because of visitor need. A more prudent measure in the long term may be to formalize selected ones rather than attempt to obliterate them.
- **An information kiosk should be erected to interpret and orient visitors on the rich Civilian Conservation Corps history as well as the historical resort once flourishing on this site.** The Friends of Lake Crescent believe that the history of the CCC is a proud one all too often ignored. The CCC was instrumental in constructing a network of campgrounds, backcountry shelters, fire lookouts, roads and bridges throughout the park (and the nation). They put a generation of young Americans to work and many older ones back to work during the height of the Great Depression. Their story must be told and their achievements chronicled. Here on the site of one of their camps is a unique opportunity to do this in keeping with the intent of historical preservation.
- **Remove sufficient vegetation to allow access to the shoreline; revegetate campsites as necessary; revegetate and repair creek banks as appropriate.** The Friends of Lake Crescent believe that selective removal of vegetation along the shoreline will allow use of the shoreline and help remove the need for social trails. Revegetation will improve the understory and in general benefit the environment.

East Beach

- **Develop an overall site plan to include an overall trail plan; make improvements to East Beach management area.** The Friends of Lake Crescent believe the importance of and need for an overall plan and sense of direction is obvious and needs little justification. It must include a clear statement of the long-term objectives and considerations. Any adverse effects from localized areas of more concentrated use within the overall lake (watershed) area can be at least partially mitigated by improvement in the East Beach management area.
- **Conduct a study to determine the need for a seasonal, trailer-mounted snack bar concession to be operated only during the summer season (operation may be determined to only be appropriate on weekends and holidays).** The Friends of Lake Crescent believe that a seasonal facility to provide limited food service is keeping with the historical use (as a resort) of the East Beach area. The additional revenue available to Olympic National Park could be well utilized.

- **Construct additional permanent toilets to eliminate overuse; add additional picnic tables; construct a launch area with boat ramp and dock.** The Friends of Lake Crescent believe that although the problem with the current toilets appears to be one of irregular service by Olympic National Park rather than not enough commodes, construction of additional facilities could be considered. If Olympic National Park cannot service the existing toilets adequately, it should consider contracting this service. Any additional toilets must be in compliance with the Americans with Disabilities Act. Additional picnic tables are also required to accommodate summer visitors. A small boat launch area would serve to mitigate the problems the park perceives with recreational use of the lake. Siting a small, auxiliary launch ramp here would encourage use of Pirate's Cove and not endanger the current swimming area.
- **Redesign parking area with designated handicapped parking to move parking away from beach; designate approximately half of beach parking for handicapped use only; construct additional overflow parking elsewhere within walking distance of beach and provide trail to beach.** Of all the areas on the lake, the Friends of Lake Crescent believe East Beach is the most constrained for parking. Improvement of the parking area while moving it farther away from the beach will make room for additional picnic tables and protect the environment at the same time. An additional parking area will allow elimination of the dangerous practice of parking along roads.
- **Do not construct a trail, with overlook, between East Beach and Govan Hill terminating at the park boundary on U.S. 101.** The Friends of Lake Crescent believe there is no valid justification for this trail. Maintenance would become an issue and increase the number of miles of trails the park has great difficulty maintaining now.
- **Improve parking lot.** The Friends of Lake Crescent believe that improvement of the vehicle parking lot will protect the environment by encouraging parking only in designated areas.

North Shore

- **Develop an overall site design (including picnic area); develop overall trail plan for the North Shore picnic area.** The Friends of Lake Crescent believe the importance of and need for an overall plan and sense of direction is obvious and needs little justification. It must include a clear statement of the long-term objectives and considerations.
- **Construct permanent toilet (in compliance with the Americans with Disabilities Act) at Lyre River and North Shore trailheads of Spruce Railroad trail; do not develop backcountry walk- or bike-in camping sites; expand the North Shore picnic area by opening it to overnight camping (tents only).** The Friends of Lake Crescent believe that environmental considerations require construction of permanent toilets at each end of the Spruce Railroad trail. Existence of backcountry or bike-in camping sites will cause an unacceptable increase in the risk of environmental damage and fire danger in this dry and historically fire-prone area. Park resources, both current and expected, do not counter this risk. The last two fires on the lake started in this most inaccessible area and damage from those fires is still evident. Camping opportunities for hikers and bikers as well as vehicle travelers can be provided by reserving half of the little used North Shore picnic area for tent camping. This will

relieve pressure on other areas and cause no perceptible harm provided the area is improved as recommended below.

- **Extend the Spruce Railroad (following the old railroad grade) to the western park boundary (Fairholm summit) from the current western trailhead (at the end of the Camp David Jr./North Shore Road) as a non-motorized, multi-purpose trail (for bikes, horses, hikers, etc.) only if the trail does not cross private property and measures for the protection of water supply systems and fire protection are incorporated into the trail design (fences of an appropriate design may be required where the trail is adjacent to private property); improve North Shore picnic area by repairing old and constructing new trails per overall trail plan; improve North Shore picnic area by constructing additional picnic sites; construct permanent toilets in picnic area.** The Friends of Lake Crescent believe that preservation of private property integrity and preventing trespassing or damage to the water systems is a critical park responsibility in extending the trail toward the western park boundary. The extended trail would provide a safe route for cyclists in transiting the lake area. The picnic area is dark and dingy and gives a visitor the impression of neglect. We must correct this. Permanent toilets are a necessity and must be constructed to meet the Americans with Disabilities Act standards.
- **Improve existing North Shore picnic area parking lot to include designation of individual parking spaces; construct additional parking spaces at North Shore picnic area; expand parking area at western and eastern trailheads of Spruce Railroad trail; do not erect a gate across Camp David Jr./North Shore Road at the picnic area, blocking off the remainder of the road to everyone but residents, their guests, and park staff.** The Friends of Lake Crescent believe that the current parking situation in this picnic area is unsatisfactory both in the state of maintenance and layout. Improvement is necessary and will benefit visitors and protect the environment. Expanded parking will improve safety at the trailheads and is necessary to accommodate visitors and protect the environment. The proposed locked gate across the Camp David Jr. Road is an intolerable attempt to limit the right of residents living beyond it from the full use and enjoyment of their property. Moreover, it will only encourage the possibility of someone parking in front of the gate, blocking access to the area beyond in the event of an emergency. Similarly, a locked gate will also prevent other property owners in the vicinity and available visitors from assisting in an emergency situation until official help can be summoned (a long time, frequently). As any woodsman knows, the initial period of time after a fire begins is very critical when fighting forest fires. Overall, the locked gate creates a grossly unsafe situation for everyone. All property owners beyond the proposed barrier oppose this proposal. This proposal should be dropped immediately without additional discussion.
- **Erect a kiosk giving interpretive information along with trail information, directions, etc. in the picnic area only.** The Friends of Lake Crescent believe that no kiosk is necessary along the Spruce Railroad trail. A kiosk along the trail would be difficult to maintain and would not add anything not possible with one at each end of the trail and in the picnic area. Maintaining displays in these locations is much easier with the limited manpower resources Olympic National Park expects to have.
- **Provide positive fire protection measures.** The Friends of Lake Crescent believe that before making any improvements to the Spruce Railroad trail, a positive fire protection system must be in place in addition to a fire prevention plan. Saying "we will fight any fire that occurs" simply isn't good enough. Fire protection and prevention must become a visible reality not just a verbal statement. This point was

made repeatedly in written comments at the scoping session in 1995 but has been totally ignored in this draft plan. This is irresponsible and grossly neglectful. It cannot continue!

VISITOR SERVICES/FACILITIES

- **Do not erect large entry signs at eastern and western entrances to Olympic National Park on U.S. 101 at Lake Crescent; do not erect secondary entry signs at eastern and western entrances to Olympic National Park on East Beach/Piedmont Roads; do not develop U.S. 101 as a parkway with installation of rock walls, signs made from local materials, and interpretive displays to educate visitors about history of the lake and its settlement; establish a visitor information center on U.S. 101 east of the junction with East Beach Road (between East Beach Road and Shadow Mountain).** The Friends of Lake Crescent believe that the current signs are adequate for a public highway and anything larger would constitute visual pollution over this very scenic area. The view of the lake that visitors get when crossing Govan Hill must be protected. It is very doubtful that anyone will fail to realize they are in Olympic National Park. Similar logic applies to the East Beach Road. The installation of rock walls and additional displays along the highway are an unnecessary expense and create a safety hazard on what Olympic National Park claims is a very dangerous stretch of roadway. The Friends of Lake Crescent contend that we should be focusing the drivers' attention on the road and traffic, not on other things along the roadway. Establishment of a visitor information center on U.S. 101 east of the junction with East Beach Road would allow public and private organizations an opportunity to provide information to visitors.
- **Adequate comfort station facilities must be made available throughout the Lake Crescent Management Area.** The Friends of Lake Crescent have received complaints from visitors, recreational users, and property owners alike about the paucity of comfort station facilities around the lake, particularly the lack of flush toilets at La Poel. No one likes to stop and find human excrement, toilet paper and soiled disposable diapers scattered about. In addition to operating all the current established facilities, especially during the summer season, Olympic National Park should consider contracting for temporary facilities in critical locations like Sledge Hammer Point, Wallace Point, and other popular scenic stopping areas around the lake.

TRANSPORTATION/CIRCULATION

- **Improve U.S. 101 around the lake by widening, straightening, and adding bicycle/pedestrian lanes on the shoulders; improve East Beach Road by widening, straightening where appropriate, and adding bicycle/pedestrian lanes on the shoulders; improve Piedmont Road by widening, straightening where appropriate, and adding bicycle/pedestrian lanes on the shoulders; improve Lyre River Road by widening and adding bicycle/pedestrian lanes on the shoulders and paving to the Spruce Railroad trailhead.** The Friends of Lake Crescent wish to see all of these improvements made in the interest of public safety.
- **Provide for a tour boat on Lake Crescent that will not only offer visitor rides during the day but be available for charter outside normal operating hours; in the interest of economic viability, it should call at each resort and perhaps at La Poel and East Beach.** The Friends of Lake Crescent

believe that operation of a tour boat on the lake is of historic significance. It also offers visitors without boats an opportunity to travel the lake's surface and experience a view only possible from the water.

WATER RECREATION

- **Make no changes to current water recreation policy¹; retain shoreline access for boats (this means you may continue to use the shoreline of the lake [e.g., Pirate's Cove and Harrigan's Point] to beach your boat, water ski, or just picnic); investigate the use of a "citizens' auxiliary" composed of boat owners to assist Olympic National Park in patrolling the lake, increasing safety for all lake surface users; change the fishing regulations so youthful visitors experience the joy of fishing (the minimum fish length for them must be decreased); consider establishing/constructing an auxiliary launch ramp at Wallace Point.** The Friends of Lake Crescent believe that adequate laws, regulations, and rules currently exist to ensure safe, responsible watercraft use on Lake Crescent. If Olympic National Park cannot afford adequate watercraft patrol, then use of a "citizens' auxiliary" for added coverage under the umbrella of the Volunteers in Parks (VIP) program should be tried before any additional restrictions are implemented. The Friends of Lake Crescent are confident that the vast majority of boaters will cooperate and the lake will remain a safe place to be. The Friends of Lake Crescent are willing to work with Olympic National Park to make this a reality. Cooperation also moderates the extremes of each user group's demands. On a lake of over 5,000 acres, there is room for all surface users to enjoy the lake safely. In the past, individual members of the Friends of Lake Crescent have participated in numerous rescue operations when Olympic National Park personnel were unavailable. Selected members of the Friends of Lake Crescent are willing to form the nucleus of a volunteer citizens' auxiliary to ensure the lake remains available for all.

Reducing the minimum length of fish a juvenile fisherman is allowed to possess will allow younger fishermen to experience the joy of fishing. Currently, only those with access to expensive and professional equipment can do so. We must return to the period when a youngster could fish from shore or a dock and expect to catch a fish for breakfast. Given the number of such fishermen, it seems unlikely they will have any measurable impact on the total fish population.

¹The Friends of Lake Crescent want no changes made to current water recreation policy, including the continued use of personal watercraft on Lake Crescent. However, since the National Park Service has determined that PWC use poses a threat to park resources and values and adversely affects the experience of other park visitors, particularly those seeking a resource-based experience dependent on a national park setting (see Appendix A), PWCs would be prohibited from Lake Crescent under each of the alternatives considered.

TABLE 1. COMPARISON OF THE PROPOSED ACTION AND ALTERNATIVES

| PROGRAM ELEMENTS | | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) |
|--------------------------------|---|--------------------------------------|------------------------------|---|---------------|--|
| FAIRHOLM | | | | | | |
| Planning/Administration | | | | | | |
| 1 | Develop an overall site design | YES | NO | YES | YES | YES |
| 2 | Develop an overall trail plan | YES | NO | YES | YES | YES |
| 3 | Retain the store | YES (relocate and add parking) | YES (no improvements) | YES (improve appearance and add parking) | NO | YES (relocate and add parking) |
| 4 | Convert current store parking into a scenic overlook with interpretive display | NO | NO | NO | NO | YES |
| 5 | Concession option to operate a food service such as a restaurant or snack bar | YES (in-store only) | YES | YES (either in-store or separate building) | NO | YES |
| Accommodations | | | | | | |
| 6 | Reconfigure the campground: designate RV sites separate from tent sites; improve pedestrian circulation; revegetate; no RV hook-ups | YES | NO | NO | NO | NO |
| 7 | Reconfigure the campground: provide separate loops for RV sites and tent sites; improve pedestrian circulation; revegetate; provide RV hook-ups | NO | NO | YES | NO | YES |
| 8 | Reconfigure the campground: improve pedestrian circulation; revegetate; no RVs | NO | NO | NO | YES | NO |
| Recreation | | | | | | |
| 9 | Concession option to provide boat rental service | YES | YES | YES | NO | YES |
| 10 | Concession option to provide bike rental service | YES | NO | YES | NO | YES |

| PROGRAM ELEMENTS | | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) |
|--------------------------------|--|---|---|---------------|--------------------------|--|
| Recreation | | | | | | |
| 11 | Designate a picnic area | NO | NO | YES | NO | YES |
| 12 | Retain designated swimming area | YES | YES | YES | NO | YES |
| 13 | Retain boat ramp and reconstruct dock | YES | YES (but do not reconstruct dock) | YES | NO | YES (improve boat ramp and dock) |
| Environmental | | | | | | |
| 14 | Remove campsites along shoreline; revegetate area | YES | NO | NO | YES | NO (but revegetate as appropriate) |
| 15 | Remove underground boat fuel tank and install an above-ground fuel tank | YES | YES | YES | NO (remove tank only) | YES |
| BARNES POINT | | | | | | |
| Planning/Administration | | | | | | |
| 1 | Develop an overall site design | YES | NO | YES | YES | YES |
| 2 | Develop an overall trail plan | YES | NO | YES | YES | YES |
| 3 | Concession option to increase the number of units at Lake Crescent Lodge, not to exceed a 10% increase in existing units | YES (first investigate feasibility of project) | NO | YES | NO | YES (after careful study) |
| Accommodations | | | | | | |
| 4 | Construct a multi-use facility at Lake Crescent Lodge | NO | NO | YES | NO | NO |

| PROGRAM ELEMENTS | | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) |
|-----------------------------------|--|------------------------------------|------------------------------|---------------|---------------|--|
| Recreation | | | | | | |
| 5 | Repair or replace existing dock or construct new dock at Lake Crescent Lodge | YES | NO | NO | NO | YES |
| 6 | Construct a second small boat dock at the existing boat ramp | NO | NO | YES | NO | YES |
| 7 | Install an accessible restroom at Bovee's Meadow with water and sewer hook-ups | YES | NO | YES | NO | YES |
| 8 | Relocate the picnic area at Bovee's Meadow away from the shoreline | YES | NO | YES | YES | NO |
| 9 | Establish a buoyed swimming area at Bovee's Meadow | NO | NO | YES | NO | NO |
| 10 | Close the beach at Bovee's Meadow to day use; revegetate area | NO | NO | NO | YES | NO |
| 11 | Obliterate/revegetate the social trails between Bovee's Meadow and Barnes Creek | YES | NO | YES | YES | YES (convert some social trails to established trails) |
| Transportation/Circulation | | | | | | |
| 12 | Analyze parking needs and expansion opportunities near the Storm King Ranger Station for automobiles and boat trailers | NO | NO | YES | NO | NO (construct additional parking for boat trailers and tow vehicles by expanding existing facility) |
| Interpretation/Orientation | | | | | | |
| 13 | Establish an interpretation/orientation focus at the Storm King Ranger Station; relocate park administrative functions to the NPS-owned Carter House | YES | NO | YES | YES | NO |

| PROGRAM ELEMENTS | | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) |
|-----------------------------------|---|------------------------------------|---|---------------|---------------|--|
| Environmental | | | | | | |
| 14 | Construct an above-ground fuel tank and offer boat fuel at launch ramp | NO | NO | NO | NO | YES |
| LOG CABIN | | | | | | |
| Accommodations | | | | | | |
| 1 | Develop an overall site design | YES | NO | YES | YES | YES |
| 2 | Develop an overall trail plan | YES | NO | YES | YES | YES |
| 3 | Remove the A-frame units and locate replacement units away from the shoreline | YES | NO | NO | YES | NO |
| 4 | Replace some RV camping with cabins | YES | NO | NO | NO | NO |
| 5 | Close the RV camping area and revegetate | NO | NO | NO | YES | NO |
| Recreation | | | | | | |
| 6 | Retain boat ramp and reconstruct dock | YES | YES (but do not reconstruct dock) | YES | NO | YES (upgrade both structures) |
| 7 | Reserve the lakefront for day use | NO | YES | YES | NO | YES |
| 8 | Concession option to provide boat rental service | YES | YES | YES | NO | YES |
| 9 | Concession option to provide bike rental service | YES | NO | YES | NO | YES |
| Transportation/Circulation | | | | | | |
| 10 | Provide additional parking | YES | NO | YES | NO | YES (on south side of East Beach Road) |

| PROGRAM ELEMENTS | | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) |
|-----------------------------------|---|---|------------------------------|---------------|--------------------------|---|
| Interpretation/Orientation | | | | | | |
| 11 | Consider establishing an interpretation/orientation program focusing on Euroamerican settlement in the Lake Crescent area | YES | NO | NO | NO | YES |
| Environmental | | | | | | |
| 12 | Install an above-ground fuel tank and provide public boat fueling | YES | NO | YES | NO | YES |
| LA POEL | | | | | | |
| Planning/Administration | | | | | | |
| 1 | Develop an overall site design | YES | NO | YES | YES | YES |
| 2 | Develop an overall trail plan | YES | NO | YES | YES | YES |
| 3 | Close the area to camping; remove existing campsites; revegetate area | NO | NO | NO | YES | NO |
| 4 | Determine the need for a seasonal, trailer-mounted snack bar concession | NO | NO | NO | NO | YES |
| Accommodations | | | | | | |
| 5 | Establish a tent camping area | YES (investigate feasibility of establishing tent sites) | NO | YES | NO | YES (maintain campground with half tent sites, half day use) |
| Recreation | | | | | | |
| 6 | Retain day use and picnicking | YES (away from creek) | YES | NO | YES (away from creek) | YES |
| 7 | Improve beach access through selective removal of vegetation from the shoreline | NO | NO | YES | NO | YES |
| 8 | Construct a boat ramp and dock | NO | NO | YES | NO | YES |

| PROGRAM ELEMENTS | | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) |
|-----------------------------------|---|------------------------------------|------------------------------|---------------|---------------|---|
| Recreation | | | | | | |
| 9 | Designate a swimming area | NO | NO | NO | NO | YES |
| Interpretation/Orientation | | | | | | |
| 10 | Erect information kiosk to interpret CCC/resort history of area | NO | NO | NO | NO | YES |
| EAST BEACH | | | | | | |
| Planning/Administration | | | | | | |
| 1 | Develop an overall site design | YES | NO | YES | YES | YES |
| 2 | Develop an overall trail plan | YES | NO | YES | YES | YES |
| 3 | Determine the need for a seasonal, trailer-mounted snack bar concession | NO | NO | NO | NO | YES |
| 4 | Limit the use of East Beach and revegetate | NO | NO | NO | YES | NO |
| Accommodations | | | | | | |
| 5 | Install new accessible toilets (vault or composting) | YES | NO | YES | NO | YES (construct permanent toilets) |
| Recreation | | | | | | |
| 6 | Construct a launch area with boat ramp and dock | NO | NO | NO | NO | YES |
| Transportation/Circulation | | | | | | |
| 7 | Redesign the parking area and move it away from the shoreline (short-term improvements) | YES | NO | YES | NO | YES |
| 8 | Designate beach parking for visitors with disabilities only and construct an upper parking lot with a trail to the beach (long-term improvements) | YES | NO | YES | NO | YES (provide additional parking [doesn't specify where]) |

| PROGRAM ELEMENTS | | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) |
|-----------------------------------|---|------------------------------------|------------------------------|---|---------------|--|
| Interpretation/Orientation | | | | | | |
| 9 | Investigate the feasibility of building a trail with a scenic overlook on the Fisher parcel | YES | NO | YES | NO | NO |
| NORTH SHORE | | | | | | |
| Planning/Administration | | | | | | |
| 1 | Develop an overall site design | YES | NO | YES | YES | YES |
| 2 | Develop an overall trail plan | YES | NO | YES | YES | YES |
| 3 | Provide positive fire protection measures | NO | NO | NO | NO | YES |
| Accommodations | | | | | | |
| 4 | Develop interpretive displays at both ends of the Spruce Railroad trail | YES | NO | YES (develop interpretive kiosk along trail) | NO | NO (locate kiosk in picnic area only) |
| 5 | Install accessible toilets in the North Shore picnic area | YES | NO | YES | NO | YES (construct permanent toilets) |
| 6 | Install accessible toilets at both ends of the Spruce Railroad trail | YES | YES | YES | NO | YES (construct permanent toilets) |
| 7 | Develop backcountry walk- or bike-in campsites along the Spruce Railroad trail | NO | NO | YES | NO | NO |
| 8 | Expand the North Shore picnic area by opening it to overnight camping (tents only) | NO | NO | NO | NO | YES |

| PROGRAM ELEMENTS | | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) |
|------------------------------------|---|------------------------------------|------------------------------|---------------|---------------|---|
| Recreation | | | | | | |
| 9 | Improve the Spruce Railroad grade to the western park boundary as a non-motorized, multi-purpose trail | YES | NO | YES | NO | YES (but do not cross private property and provide for landowner protection) |
| Transportation/Circulation | | | | | | |
| 10 | Improve the North Shore picnic area | YES | NO | YES | NO | YES |
| 11 | Analyze parking needs and provide for modest expansion at the east and west ends of the Spruce Railroad trail | YES | NO | YES | NO | YES |
| 12 | Construct additional parking spaces at the North Shore picnic area | NO | NO | NO | NO | YES |
| 13 | Gate the North Shore Road past the picnic area | NO | NO | YES | NO | NO |
| VISITOR SERVICES/FACILITIES | | | | | | |
| 1 | Establish U.S. 101 within Olympic National Park as a parkway emphasizing the human and natural history of the lake | YES | NO | YES | NO | NO |
| 2 | Erect attractive entry signs at the eastern and western entrances to Olympic National Park at Lake Crescent | YES | NO | YES | YES | NO |
| 3 | Install park entrance signs along East Beach Road | YES | NO | YES | YES | NO |
| 4 | Investigate the feasibility of establishing an information/orientation facility on U.S. 101 east of the intersection with East Beach Road | YES | NO | YES | NO | YES |

| PROGRAM ELEMENTS | | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) |
|------------------------------------|---|--|--------------------------------|---------------------------------|--|--|
| VISITOR SERVICES/FACILITIES | | | | | | |
| 5 | Provide additional restroom facilities throughout the Lake Crescent area | YES | NO | YES | NO | YES |
| TRANSPORTATION/CIRCULATION | | | | | | |
| 1 | Investigate the feasibility of widening East Beach Road, Piedmont Road, and Lyre River Road to improve safety and accommodate bicycles | YES | NO | YES | NO | NO |
| 2 | Improve U.S. 101, East Beach Road and Piedmont Road by widening, straightening, and adding bicycle/pedestrian lanes; improve Lyre River Road by widening, adding bicycle/pedestrian lanes and paving to the Spruce Railroad trailhead | NO | NO | NO | NO | YES |
| 3 | Support the operation of a commercial educational tour boat | YES | YES | YES | NO | YES (also provide charter service) |
| 4 | Explore the feasibility of adding tour boat stops around the lake | YES | NO | YES | NO | YES |
| WATER RECREATION | | | | | | |
| 1 | Allow motorized boats | YES 100/300-yard no-wake zone ² | YES 50-yard no-wake zone | YES 100-yard no-wake zone | YES 100/300-yard no-wake zone ² | YES 50-yard no-wake zone |
| 2 | Prohibit the use of personal watercraft (PWC) | YES | YES | YES | YES | See footnote ³ |

²Establish a 100-yard no-wake zone from shoreline, and a 300-yard no-wake zone adjacent to public use areas, the two historic districts, and habitat-sensitive areas.

³The Friends of Lake Crescent want no changes made to current water recreation policy, including the continued use of personal watercraft on Lake Crescent. However, since the National Park Service has determined that PWC use poses a threat to park resources and values and adversely affects the experience of other park visitors, particularly those seeking a resource-based experience dependent on a national park setting (see Appendix A), PWCs would be prohibited from Lake Crescent under each of the alternatives considered.

| PROGRAM ELEMENTS | | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) |
|-------------------------|---|------------------------------------|------------------------------|---------------|-----------------|--|
| WATER RECREATION | | | | | | |
| 3 | Retain shoreline access for boats | YES | YES | YES | NO | YES |
| 4 | Establish a designated speed limit for motorized watercraft | YES (40 mph) | NO | NO | YES (35 mph) | NO |
| 5 | Establish horsepower (hp) limits for motorized watercraft | NO | NO | NO | YES (25 hp) | NO |
| 6 | Investigate the use of a citizens' auxiliary to assist Olympic National Park in patrolling the lake | YES | NO | NO | NO | YES |
| 7 | Change the fishing regulations to decrease the minimum fish length for young fishermen | NO | NO | NO | NO | YES |
| 8 | Consider establishing/constructing an auxiliary launch ramp at Wallace Point | NO | NO | NO | NO | YES |

TABLE 2. SUMMARY OF ENVIRONMENTAL CONSEQUENCES OF THE ALTERNATIVES

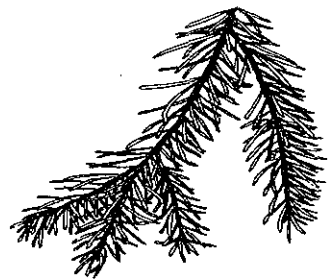
| IMPACT TOPIC | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) |
|---|---|---|-------------------------------|---|-------------------------------------|
| <p>NATURAL RESOURCES</p> <p>Air Quality</p> | <p>Since pollution sources would be temporary, localized, and of small magnitude, there would be no adverse effect on air quality or related values in the Lake Crescent watershed. Overall, it is expected that diminished air quality would have no effect on human health and would result only in minor and temporary impairment of visibility.</p> | <p>Under the no action alternative, impacts on air quality and related values are expected to remain localized, temporary, and insignificant despite a potential increase in visitor use levels.</p> | <p>Same as Alternative A.</p> | <p>Even if all of the above projects were to occur simultaneously, which would be extremely unlikely, the combined effect of equipment emissions on air quality in the Lake Crescent watershed would be barely noticeable, given that emissions from commercial trucks on U.S. 101 are not an apparent problem. Overall, it is expected that diminished air quality would have no effect on human health and would result only in minor and temporary impairment of visibility.</p> | <p>Same as Alternative A.</p> |
| <p>Wilderness</p> | <p>Although none of the proposed actions would have a direct impact on the Olympic Wilderness, indirect impacts such as noise and viewshed impairment in the Lake Crescent area may detract from the wilderness experience of some visitors.</p> | <p>Although existing management practices and visitor activities do not have a direct impact on the Olympic Wilderness, indirect impacts such as noise and viewshed impairment in the Lake Crescent area may detract from the wilderness experience of some visitors.</p> | <p>Same as Alternative A.</p> | <p>Despite the removal of visitor services and facilities from around the lake, which would result in a noticeable decrease in human intrusions, indirect impacts such as noise and viewshed impairment in the Lake Crescent area may still detract from the wilderness experience of some visitors.</p> | <p>Same as Alternative A.</p> |

| IMPACT TOPIC | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) |
|---|--|---|--|--|--|
| <p>NATURAL RESOURCES</p> <p>Water Resources</p> | <p>Increased levels of pollutants from parking lot runoff, siltation during construction, and fuel spills and emissions from increased levels of boating could potentially decrease the overall water quality of the lake. However, mitigation measures would be employed to ensure that water quality and other habitat values are not adversely affected.</p> | <p>Turbidity and sedimentation resulting from both natural processes and visitor use have the potential to degrade the water quality of Lake Crescent. However, effects are not expected to have a long-term negative consequence on water quality within the watershed due to the localized and short-term nature of the impact.</p> | <p>Same as Alternative A.</p> | <p>Overall, actions proposed in this alternative would alleviate some existing sources of pollution, would prevent future sources, and would have only minor and short-term negative effects on the water quality of Lake Crescent.</p> | <p>Overall, water quality impacts would be slightly greater compared to Alternative A due to the greater number of boat docks and launch ramps proposed under this alternative. As with Alternative A, mitigation measures would be employed to ensure that water quality and other habitat values are not adversely affected.</p> |
| <p>Geology and Soils</p> | <p>Approximately 3-4 acres of previously disturbed soils would be impacted by new facility construction. Widening of the Spruce Railroad trail would create extensive cut slopes at both tunnel locations. The total area of new trail surface would be about one acre, mostly within the former right-of-way. Many proposed actions, including detailed site and trail planning, would help mitigate impacts caused by visitor use.</p> | <p>Although existing management practices and visitor activities would result in little new ground disturbance, resource damage including vegetation trampling and removal, barren ground, altered drainage patterns, and soil compaction and erosion would persist in areas of concentrated visitor use. Management actions to correct such problems would continue.</p> | <p>In addition to impacts described under Alternative A, up to one additional acre of presently undisturbed soils would be affected by new campsite construction. Although soil compaction and erosion would continue in heavily used areas, some actions would help mitigate impacts.</p> | <p>Actions proposed in this alternative would restore natural conditions to approximately four acres of presently developed land. Although fill material would be required to restore previously disturbed sites to natural conditions, less than a tenth of this acreage would require fill and/or topsoil treatment.</p> | <p>Impacts on geology and soils would be similar to those described for Alternative A.</p> |

| IMPACT TOPIC | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) |
|---|---|---|--|---|--|
| <p>NATURAL RESOURCES</p> <p>Vegetation</p> | <p>Proposed actions would continue to expand the trend away from natural vegetative processes. New construction would disturb or eliminate vegetation from 3-4 acres of previously altered terrain. Approximately one acre of presently undisturbed vegetation would be lost due to construction of the Spruce Railroad trail. To help mitigate vegetation impacts, disturbed areas would be revegetated with native species and restored to natural conditions to the extent possible.</p> | <p>Vegetation trampling and disturbance would continue to occur in high visitor use areas due to poor site design, including a lack of well-defined pathways. Retention of some visitor facilities in their present locations could have continuing or increasing effects on several species of rare plants in nearshore habitats of Lake Crescent. Management efforts such as eliminating nonnative plants and revegetating disturbed sites with native vegetation would continue.</p> | <p>In addition to impacts described under Alternative A, rare aquatic plant species would be put at greater risk from construction and recreational use. New construction would disturb or eliminate vegetation from 3-4 acres of previously altered terrain. Also, two acres of presently undisturbed vegetation would be lost due to construction of the Spruce Railroad trail and backcountry campsites. Mitigative measures would help restore native vegetation to disturbed sites wherever possible.</p> | <p>Actions proposed in this alternative would have substantial beneficial effects on the restoration and protection of native vegetation at Lake Crescent. Disturbed and formerly disturbed vegetation would be restored to support native plants and ecological processes. The trend toward more development and net loss of native vegetation would be reversed. Rare aquatic plant species would be put at lower risk from existing facilities and recreational use.</p> | <p>Impacts on vegetation would be similar to those described for Alternative A, with the exception that rare aquatic plant species could be put at added risk from the construction and use of new boat docks and ramps at La Poel and East Beach. However, before any actions occur at these sites, thorough surveys and appropriate measures taken to protect rare plants.</p> |
| <p>Wildlife</p> | <p>Many projects would have short-term disturbance effects on wildlife during construction, while others would have a long-term effect due to habitat loss. Such impacts are not expected to be significant due to the small acreages involved, the proximity to existing development, and the availability of undisturbed habitat nearby. A ban on PWC use is likely to have a beneficial effect.</p> | <p>A continuation of existing management practices would not result in significant impacts on wildlife and would not significantly affect animal behavior or habitat use in the Lake Crescent watershed. The proposed ban on PWC use is likely to have a beneficial effect by decreasing the potential for human disturbance.</p> | <p>Many actions would have short-term disturbance effects on wildlife during construction; others would have a long-term effect due to habitat loss. Generally, impacts are not anticipated to be significant; however, any loss of habitat for juvenile trout must be regarded as serious. A ban on PWC use is likely to have a beneficial effect by decreasing human disturbance.</p> | <p>Many of the actions proposed in this alternative would have a beneficial effect on wildlife and its habitat by minimizing human disturbance and intrusions. Impacts associated with the removal of some facilities are expected to be minor and of short duration.</p> | <p>Impacts on wildlife would be similar to those described for Alternative C.</p> |

| IMPACT TOPIC | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) |
|--|---|---|--|---|--|
| CULTURAL RESOURCES | In areas not previously surveyed, cultural resource inventory and evaluation for historic structures, cultural landscapes, archeological sites, and traditional cultural properties would be required, as would appropriate levels of consultation with the <i>State Historic Preservation Office</i> . These activities would be completed prior to taking any action. <i>The Secretary of the Interior's Standards for Rehabilitation</i> would guide all design work on historic structures. | Noise associated with the use of motorboats has a negative impact on the peaceful atmosphere of both the Rosemary Inn and Lake Crescent Lodge Historic Districts. | Same as Alternative A. | Same as Alternative A. | Same as Alternative A. |
| PARK OPERATIONS/ ADMINISTRATION | Proposed increases in visitor services and facilities would impose added demands on park management, including maintenance of additional facilities and an increased demand for services by Lake Crescent rangers. Such increases would be countered by a slight decrease in maintenance needs due to the removal of some facilities. | Current interpretive, resource management and law enforcement functions would be maintained. With the retention of several administrative functions at Storm King Ranger Station, crowded working conditions at that facility would continue. | Proposed actions would create additional facilities for the National Park Service to protect and maintain. To deal with the potential increase in visitors attracted to these new facilities, it would be necessary for the park to increase its staffing. Without increases to the overall park staff and budget, additional staff would have to come from other areas of the park. | The proposed reduction of visitor services and facilities would decrease some demands on the National Park Service, while increasing others. Some maintenance activities would be reduced or eliminated, whereas increased ranger vigilance and patrol may be necessary to prevent or respond to accidents and resource damage. | With additional facilities to protect and maintain and with a possible increase of visitors attracted to improved facilities, it would be necessary for the park to increase its staffing. The new staffing level would be similar to that of Alternative C. Without increases to the overall park staff and budget, additional staff would have to come from other areas of the park. |

| IMPACT TOPIC | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) |
|--|---|--|---|--|--|
| VISITOR USE/ EXPERIENCE | <p>In the short term, park visitors would be inconvenienced due to temporary closures, noise and impaired visibility associated with construction activities. Over the long term, there would be more recreational opportunities available at more sites at Lake Crescent. Opportunities to enjoy natural features of the area, as compared to recreational features, would be enhanced under this alternative.</p> | <p>A diversity of recreational and visitor-use opportunities would continue to be provided in the Lake Crescent area, although a general reduction in the quality of the experience could occur as more people use the lake for a variety of recreational activities and conflicts among user groups increase. Without corrective actions, visitor use would continue to cause resource impacts, creating a less natural landscape and detracting from the quality of the visitor experience. The most significant effect would be the alteration of the existing character of the lake.</p> | <p>Actions contained in this alternative would result in a short-term inconvenience for park visitors due to temporary closures, noise and impaired visibility. Over the long term, there would be more recreational opportunities available at more sites in the Lake Crescent area. Recreational experiences that depend on unspoiled natural conditions, solitude, and low volumes of visitor use would not be enhanced, and would most likely be diminished under this alternative.</p> | <p>Actions proposed in this alternative would change the scope of the recreational experience at Lake Crescent. Those visitors seeking to enjoy the natural values present would find their experience enhanced by the removal of some facilities and activities and the restoration of natural features. Full implementation of this alternative would disappoint those visitors seeking a quality recreational experience that includes the development of amenities, but preserves the general appearance of a natural setting.</p> | <p>During the construction phase of many of these projects, some short-term inconvenience for park visitors and area residents would be expected, including temporary closures, noise and impaired visibility. Over the long term, there would be a greater number of developed recreational facilities and opportunities at Lake Crescent. However, recreational activities and experiences that depend on unspoiled natural conditions, a quiet ambience and low volumes of visitation are not enhanced by this alternative, and in many cases, would be diminished.</p> |
| LOW-INCOME AND MINORITY POPULATIONS | <p>Actions proposed in this alternative would have no known effects on low-income or minority populations.</p> | <p>The continuation of existing management practices would have no known effect on low-income or minority populations.</p> | <p>Same as Alternative A.</p> | <p>Same as Alternative A.</p> | <p>Same as Alternative A.</p> |



Affected Environment

AFFECTED ENVIRONMENT

The following sections describe that portion of the natural and human environment of the Lake Crescent area that may be affected by, or that could affect proposals under consideration.

NATURAL RESOURCES

Air Quality

Olympic National Park is designated a Class I area by the Clean Air Act of 1977. In general, air quality in the Lake Crescent watershed is good. However, visibility and ambient air quality may be affected by various factors related to local and regional pollution sources and weather conditions. Industrial and urban sources of emissions that most immediately affect the north side of the park are located in Port Angeles. Emissions from boats and automobiles within the watershed are presently not monitored. Periods of reduced visibility and air quality are moderated by coastal weather patterns, which push particulates out of the area.

No air quality monitoring occurs currently within the Lake Crescent watershed. The nearest monitoring stations, one operated by the Washington State Department of Ecology and another operated by the National Park Service, are located in Port Angeles and at Hurricane Ridge. Data from these monitoring stations are not representative of air quality conditions in the watershed due to their location, prevailing wind patterns, and emission sources.

For several years in the 1980s an automated camera recorded visibility by taking three 35 mm slide photos each day, looking south from Barnes Point. These photos are on file and constitute a visibility baseline for the Lake Crescent watershed.

Point sources of air pollution on the Olympic Peninsula include pulp and paper mills, lumber mills, veneer dryers, prescribed forest burning, and asphalt and gravel operations (U.S. Environmental Protection Agency 1997). Automobiles are becoming a greater source of pollution on the peninsula as the population increases.

Water Resources

Information is not available for groundwater resources; the following information focuses on surface water resources.

Surface Water Resources. Lake Crescent is widely recognized as a spectacular element of the Olympic Peninsula's lowland forest environment. It is physically separated from the rest of Olympic National Park by Happy Lake Ridge. Its only drainage is the Lyre River which exits the lake west of Log Cabin Resort and makes its way to the Strait of Juan de Fuca. Lake Crescent once drained into the Elwha River Valley, until a series of massive landslides separated the lake from present day Lake Sutherland. These natural events raised the surface elevation of Lake Crescent nearly 80 feet and established the Lyre River as the outfall for the lake (Logan and Schuster 1991).

AFFECTED ENVIRONMENT

Water resources within the watershed are dominated by Lake Crescent, which has a surface area of 5,127 acres and comprises 17% of the total area of the watershed. The lake's greatest depth, 624 feet, has been found off La Poel Point; the average depth of Lake Crescent is 332 feet. Other lakes in the watershed, located at the upper elevations, are much smaller in size and include Happy Lake and the Eagle Lakes.

The most recent recording of water temperatures were conducted in 1991. Surface water temperatures between June and September ranged from 57°F to 68°F. The *Lake Crescent Water Quality Status Report (1984-1989)* (NPS 1989a), recorded year-round water temperatures ranging from 43°F to 66°F, with lowest temperatures recorded off of La Poel Point.

Fifteen perennial tributaries flow into Lake Crescent, with the majority located on the southern slopes of the watershed. Drainage patterns on the south side of the lake exhibit a much greater degree of incision and concentrated flow than on the north side, which lends itself to sheetflow or dispersed subsurface flow. Barnes Creek is the main tributary into Lake Crescent; the Lyre River is the only outlet from the lake, flowing north into the Strait of Juan de Fuca. Floodplains associated with Barnes Creek and the Lyre River have not been mapped.

Numerous intermittent streams form during the spring when the snow melts, and cease flowing in the drier summer months. Many of these streams cascade over the steep slopes and nearly vertical walls immediately adjacent to U.S. 101 where they are channeled into culverts and released into Lake Crescent.

In addition to lakes and streams, the Lake Crescent watershed contains 22 wetlands identified on National Wetlands Inventory maps (Fish and Wildlife Service 1987). Most of these wetlands are located in the upper reaches of the watershed and are classified as palustrine or riverine wetlands.

Water Quality. Several water quality studies (NPS 1989a, 1991a) were conducted during the 1980s for the purpose of establishing a baseline for further water quality testing within the Lake Crescent watershed. Conclusions derived from these studies indicate that the lake is in extraordinary condition. Lake Crescent has been characterized as an oligotrophic lake with no problems requiring any form of mitigation (NPS 1991a). Oligotrophic lakes are generally low in nutrients, thereby limiting the growth of algae. Additionally, the Washington State Department of Ecology uses Lake Crescent as a reference lake in its ongoing study of freshwater lakes in Washington, due to its pristine water quality.

One study measured water quality parameters on a monthly basis between 1984 and 1987, and biannually in 1988. Monitoring was conducted in response to concerns regarding the effects of development and septic systems located along the lakeshore. Drain fields and septic tanks close to the shoreline are at risk of exposure as a result of erosive forces associated with extreme winter storms. This study showed no evidence of septic-source "enrichment". Likewise, in a more recent study conducted in 1991, there was no indication of pollution from septic systems. No water quality information is available for streams and remote lakes in the watershed.

Other potential sources of water pollution include unburned fuel released from two-cycle engines, spills or leaks from gas pumps, and gas tanks on motorized watercraft. Runoff from parking lots is also a potential source of pollution (non-point), though levels have not been established for oil or heavy metals. Expansion or construction of parking facilities, unless adequately designed to treat and store surface runoff, may result in increased amounts of these pollutants into Lake Crescent. Unexpected events such as hazardous material

spills from commercial vehicles or trucks along U.S. 101 are a significant concern of Olympic National Park.

Geology and Soils

The Lake Crescent watershed is situated within a unique geologic formation called the Crescent Formation, so named because of the horseshoe-shaped band of marine basalt that comprises the northern and eastern perimeters of the Olympic mountain range. Inside this configuration, the predominant geologic materials are sedimentary in origin. The northwestern portion of the watershed is comprised predominantly of basalt, with the southwestern portion comprised of sandstone, shales and conglomerates.

Lake Crescent is a glacially-formed lake, and was formed during the Pleistocene Epoch (Ice Age) when continental glaciers were active in the Puget Sound basin. Lake Crescent was much larger in early post-glacial time, but a series of landslides isolated the eastern portion, now known as Lake Sutherland.

Soils have formed from a variety of geologic materials including marine basalt, hard sandstone and conglomerate and interbedded sandstone, siltstone and shale, metamorphosed sediments and volcanics, continental and alpine glacial drift, and alluvium. No official soil classification or mapping has been conducted within Olympic National Park. However, some generalizations about soil characteristics can be made based upon mapping and classification conducted by the Washington State Department of Natural Resources and the U.S. Department of Agriculture's Natural Resources Conservation Service for areas adjacent to Olympic National Park that contain the same parent material.

In general, soils tend to be thin and poorly developed due to glacial scouring of the bedrock of the northern foothills belt (Brown and Grower 1960). Subsoils strongly resemble original bedrock material. Upland soils are typically well drained, with low to moderate water retention and very high infiltration rates. Soils along the lakeshore contain greater amounts of clay and are poorly drained. Sensitive soils are associated with steep slopes, incised stream channels, unstable bedrock, and water seepage areas. There is evidence of mass slope failure within the watershed; four areas of landslide deposits have been mapped by the U.S. Geological Survey. Additionally, rockfall along U.S. 101 is not uncommon during the wetter months. During the fall of 1995, a bridge on the North Shore Road was washed out when a landslide occurred during a period of heavy rain. Based on this history, the potential for on-going mass-wasting (slope failures) is high.

Topography

The topography of the watershed is one of extremes. Lake Crescent is enclosed by steep ridges on all sides. Elevations range from approximately 575 feet at lake level to roughly 1,500 feet on the northern ridge, and 4,500 feet on southerly ridges. Evidence of the underlying rock formations can be seen in the depth of the stream channels on the major north and south slopes. Streams on the north side of the watershed are underlain by a harder basalt which is resilient to downcutting. Over time, this resistance to erosion has produced a fairly even slope with relatively shallow stream valleys. The south slope, which is formed in a softer sandstone base, typically has much deeper and more numerous stream channels. The highly

dissected topography on the south slope of the watershed creates strong east and west slope aspects in individual drainages.

Vegetation

Vegetation within the Lake Crescent watershed is influenced by many factors including precipitation, topography, bedrock material, soils, slope, aspect, wind, landslides, fire, and human use. Vegetation can be classified within three major zones: the western hemlock, silver fir, and mountain hemlock zones (Henderson et al. 1989).

Some botanists describe Lake Crescent as the place where "east meets west", in terms of vegetation of the Olympic Peninsula. Species common to the western peninsula, such as Sitka spruce and Oregon oxalis are relatively uncommon east of Fairholm. Conversely, grand fir, which is common on the eastern side of the Olympics is not known west of Fairholm.

Several disjunct populations of plants are found within the watershed. (Disjunct populations are relatively small populations of plants that are separated, often by hundreds of miles, from the main population.) Giant helleborine (*Epipactis gigantea*) is rare in Washington state; the only confirmed location on the Olympic Peninsula is Lake Crescent, where it grows along the shore. Poison oak (*Toxicodendron diversilobum*) is found along the northern and eastern shores of Lake Crescent, the only known locations for it on the north Olympic Peninsula. Yerba de selva (*Whipplea modesta*), known mainly as a plant of the Oregon and California coast, is found only at two locations on the Olympic Peninsula, one of them Lake Crescent.

Western Hemlock Zone. This zone starts at lower elevations and extends up to about 2,000 feet, or where the silver fir zone begins. Dominant tree species within this zone include Douglas-fir and western hemlock, with western redcedar, grand fir, red alder, and big leaf maple also occurring within this zone. Unlike some other areas of the park, low-elevation stands around Lake Crescent also contain madrone, Pacific dogwood and Douglas maple. In very old stands, the dominant species includes western hemlock and western redcedar. Analysis of digital (GIS) data indicates that the majority of the watershed falls into this zone. Common shrubs include salal, Oregon grape, red huckleberry, Alaska huckleberry, rose and salmonberry. Herbaceous plants include swordfern, deerfern, twinflower, violet, vanillaleaf, trillium, and foamflower (Henderson et al. 1989).

Silver Fir Zone. This zone occurs in mid- to upper elevations (approximately 2,000 to 3,600 feet) and is dominated by silver fir and western hemlock. Douglas-fir can occur as a relic from earlier climatic periods or in drier areas within this zone. Associated tree species include western redcedar, mountain hemlock, and Pacific yew. Common shrubs within this zone include huckleberry, fool's huckleberry, salal and Oregon grape. Herbs include queen's cup, bunchberry, rosy twisted stalk, vanillaleaf, false lily-of-the-valley, deerfern, swordfern, dwarf bramble, foamflower, and trillium.

Mountain Hemlock Zone. This zone occurs in all but the driest parts of the peninsula between the silver fir zone and the higher subalpine and alpine zones. Cold temperatures, short growing seasons and snow depths greater than ten feet are typical of this environment. Dominant tree species include silver fir, subalpine fir and mountain hemlock and pockets of Alaska yellow cedar. Common shrubs within this zone

include Alaska huckleberry, oval-leaf huckleberry, blue-leaf huckleberry, white rhododendron, mountain ash, and red heather. Herbs include five-leaved bramble, trailing bramble, avalanche lily, queen's cup, beargrass, and pyrola.

Forest Stand Disturbances

Forest stands within the watershed have experienced a great deal of disturbance at various times, including fire, wind, and logging.

Fire. Fires play a major role in altering the forest structure, and available information indicates significant fire activity within the Lake Crescent watershed. Major fires have moved through the watershed during periods of drier climatic conditions. The most notable was in 1701, when much of the Olympic Peninsula, from Hood Canal to the northwest tip of the peninsula, was burned (Agee 1993). Other major fires moved through the watershed during the late 1800s into the early 1900s. One of these fires, which occurred sometime between 1850 and 1890, burned a large portion of the Barnes Creek drainage. Large fires in the Sol Duc drainage in 1907 and 1920 may have touched the western boundary of the watershed in the vicinity of Fairholm Hill. In 1914, a large area on the north side of the watershed west of Pyramid Peak was burned. Fires in the more recent past have been relatively small (a few acres) and caused by escaped campfires or lightning strikes along surrounding ridgetops.

Wind. Major wind storms have also occurred with relative frequency on the Olympic Peninsula, with the worst storms coming from the west. During such storms, trees are blown down, but there are no records of massive blowdowns of large stands.

Logging. Prior to the creation of Olympic National Park in 1938 and its expansion in 1940, the Lake Crescent area was under the management of the U.S. Forest Service, which may have allowed timber harvesting within the watershed. Trees were also removed for the construction of homes and summer cabins around the lake, and during World War I, the Spruce Railroad. In the mid-1950s, a park superintendent instituted a timber salvage and exchange operation in which proceeds from park timber sales were used to fund the purchase of private land and concessions. It is estimated that a total of 100 million board feet of timber were removed from the entire park between 1941 and 1958 (Lien 1991). Olympic National Park records from 1953 to 1957 indicate that approximately seven million board feet of timber were removed from the township (T30N R9W) containing the Lake Crescent watershed.

Tree Size Classification

A diversity of different sized trees can be an indicator of the developmental stage of a forest plant community following disturbance. Because the Lake Crescent watershed has experienced a good deal of disturbance, a wide range of tree size classifications exists. The majority of the watershed is in old-growth (52%), followed by mature stands (39%). The remaining nine percent is in young forest, shrubs, meadows and rocks.

Rare, Sensitive, and Special Plants

Based on information provided by the U.S. Fish and Wildlife Service, there are no federally listed, proposed, or candidate plant species likely to occur within the planning area. However, there are numerous rare, sensitive, or special vascular plants (as listed by the Washington State Natural Heritage Program and Olympic National Park) within the Lake Crescent watershed. Information regarding these plants is available from the Natural Resources Division of Olympic National Park.

Surveys of rare and sensitive aquatic species were conducted during the summer of 1995 at some of the developed sites around Lake Crescent. Areas surveyed included Log Cabin, Fairholm, Ovington, Bovee's Meadow, Lake Crescent Lodge, and Rosemary. Of the project sites listed, detailed underwater surveys for these plants have been done only at Bovee's Meadow. Here, three rare plants occur: *Isoetes occidentalis* (western quillwort), *Lobelia dortmanna* (water lobelia) and *Potamogeton illinoensis* (Illinois pondweed).

Exotic (Nonnative) Plants

Currently, approximately 250 species and varieties of exotic plants are known to be located within or adjacent to Olympic National Park. Most of these exotics are confined to lowland areas adjacent to roads, developed areas, and sites of human habitation. Few species are found in the park's interior or at higher elevations. Invasion by exotic species is among the most serious threats to the integrity of the park as a protected natural area. If established, exotic plants can disrupt natural succession, alter plant communities, displace or eliminate native species, and affect geophysical processes. Mapping of exotic plants has not been completed, but is in progress. Concentrations of exotic plants are known to exist at all developed sites; those most commonly found in the Lake Crescent area include Scot's broom, English holly, reed canarygrass, tansy ragwort, English ivy, St. John's-wort and curly pond-weed.

Wildlife

Information regarding wildlife is more readily available on a parkwide basis for mammals and birds, than for invertebrates, amphibians, or reptiles (NPS 1991b).

Many of the park's wildlife habitats are inaccessible due to very steep, densely forested slopes with few roads or trails, inclement weather, and deep snow at the higher elevations. Wildlife research has proceeded slowly due to these and other constraints; information regarding the multitude of animal species within the park is incomplete.

Mammals. Large native mammals found within the Lake Crescent watershed include Roosevelt elk, Columbia black-tailed deer, black bear and cougar. Nonnative mountain goats, which were introduced into the park in 1925 and 1929, are commonly observed at higher elevations within the watershed, although not in large numbers (NPS 1995a). Likewise, no evidence of large herds has been observed within the watershed. Columbia black-tailed deer are frequently seen in clearings and forest margins around the lake, while Roosevelt elk are believed to occur only in the western and southern portions of the watershed. Black bear are abundant throughout the area. Cougar are occasionally seen near Lake Crescent, as they are throughout the park; two encounters have been reported near the Spruce Railroad trail, neither of which

resulted in an attack. River otters inhabit the lake and can sometimes be seen swimming and playing along the shore. Douglas squirrels and chipmunks are frequently-seen residents and bats are known to occupy the two tunnels of the Spruce Railroad. A variety of rodents and other smaller mammals are less readily noticed by visitors.

Birds. Resident bird species found in lake and riparian habitats of the northern Olympic Peninsula, which are expected in the Lake Crescent area include pied-billed and western grebes, great blue heron, green heron, wood duck, green-winged teal, mallard, northern shoveler, northern pintail, hooded, common and red-breasted mergansers, American coot, osprey and belted kingfisher.

Expected year-round woodland residents include sharp-shinned, Cooper's and red-tailed hawks, northern goshawk, merlin, blue grouse, ruffed grouse, killdeer, band-tailed pigeon, western screech owl, barred owl, great horned owl, northern pygmy owl, northern saw-whet owl, red-breasted sapsucker, downy woodpecker, hairy woodpecker, northern flicker, pileated woodpecker, gray jay, Steller's jay, American crow, common raven, black-capped chickadee, chestnut-backed chickadee, bushtit, red-breasted nuthatch, brown creeper, Bewick's and winter wrens, American dipper, golden-crowned kinglet, American robin, varied thrush, cedar waxwing, Hutton's vireo, spotted towhee, golden-crowned, savannah, fox, and song sparrows, dark-eyed junco, red-winged and Brewer's blackbirds, purple and house finches, red crossbill, pine siskin, and evening grosbeak. The European starling and house sparrow are introduced species, found in developed areas throughout the watershed.

Migratory birds breeding in the Olympic lowlands including the Lake Crescent area include common nighthawk, rufous hummingbird, western wood-pewee, willow, Hammond's, Pacific-slope and olive-sided flycatchers, tree, violet-green, northern rough-winged, cliff, and barn swallows, Swainson's thrush, solitary and warbling vireo, orange-crowned, yellow, yellow-rumped, Townsend's, black-throated gray, MacGillivray's, and Wilson's warblers, western tanager, black-headed grosbeak, white-crowned sparrow, brown-headed cowbird and American goldfinch.

Non-breeding migrants through the Lake Crescent area include trumpeter swan, turkey vulture, solitary and spotted sandpipers, glaucous-winged gull, ruby-crowned kinglet, Townsend's solitaire, and hermit thrush.

Species of special concern include a pair of bald eagles which have been observed nesting within the watershed in recent years; there may be more bald eagle activity in the area, but without an active monitoring program this cannot be confirmed. The northern spotted owl and Vaux's swift, both dependent on old-growth forests, are known to nest within the Lake Crescent watershed (NPS unpublished reports). Marbled murrelets, also dependent on old-growth forests, and harlequin ducks have been observed and are believed to nest in the area (NPS observations).

Fish. Lake Crescent contains five species of fish: rainbow trout or Beardslee, cutthroat trout or Crescenti, kokanee salmon, prickly sculpin, and pygmy whitefish. The Beardslee and Crescenti are endemic stocks of rainbow and cutthroat trout which are highly adapted to the lake's environment, while the pygmy whitefish is a rare fish found only in a few isolated sites in western Washington. There is no longer any access to the lake by anadromous fish. During the 1940s, the Washington Department of Game operated a fish hatchery at Barnes Point. Several exotic species and stocks were introduced into the lake from this hatchery and other sources for recreational/sport fishing. It is suspected that nonnative cutthroat and rainbow from this

hatchery hybridized with the Crescenti in Barnes Creek. Other possible impacts resulting from these stocking efforts are unknown.

Lake Crescent is a popular recreation fishery for visitors and local sportsmen. Beginning with the 1994 season, the minimum size limit for the Beardslee and Crescenti was increased from 12 to 20 inches based on their size at maturity. The objectives of this new minimum size limit are to allow a greater proportion of fish to spawn at least once, with a goal of increasing the number of spawners. Monitoring by park staff suggests that the Beardslee population has declined from levels observed earlier (Meyer et al. 1996). There are no historic data regarding the Crescenti population.

Reptiles, Amphibians, and Invertebrates. Information is more readily available on a parkwide basis for mammals and birds than for invertebrates, amphibians, and reptiles. This lack of information, in fact, has been identified as one of the principal concerns and threats regarding animal resources of the park. It is likely that Olympic is a center of endemism for insects, particularly for those that inhabit alpine and glacial areas. Intensive studies conducted elsewhere in the Pacific Northwest have demonstrated the importance of amphibians and reptiles to the structure and function of old-growth ecosystems (NPS 1991b).

Endangered, Threatened and Candidate Animal Species

The U.S. Fish and Wildlife Service has identified four listed (endangered or threatened) avian species that are known to occur in the Lake Crescent watershed. The peregrine falcon, listed as endangered, is a seasonal migrant in the Lake Crescent area; the marbled murrelet, northern spotted owl and bald eagle, all classified as threatened, likely nest in the vicinity. Candidates for listing that may occur at or near Lake Crescent include the Cascades frog, northern red-legged frog, harlequin duck, northern goshawk, and Pacific fisher. Although suitable habitat exists for each of these species, confirmed sightings in the Lake Crescent area are rare or non-existent.

CULTURAL RESOURCES

Many visitors to Lake Crescent are not aware of its rich and colorful history. Few vestiges of the past remain to illustrate the human history of this spot. Still there are archeological sites, cultural landscapes, and historic structures that speak to these older lifeways. A brief description of the lake's history provides a framework for describing cultural resources.

Lake Crescent Prehistory

It is the professional belief of the park's cultural resource management staff that the National Park Service must be prepared to find prehistoric archeological sites around Lake Crescent. This belief is based on: the park's archeological overview and research design (Schalk 1988); the fact that historic tribal sites are located on the Lyre River and Indian Creek; numerous prehistoric sites are located in the high country south of Lake Crescent; there are ethnographic references to Mount Storm King; the park has completed only limited amounts of archeological survey work near the lake; and there are good travel routes to Lake

Crescent from several directions. Nearly identical sets of corroborating evidence have been used to successfully predict the location of prehistoric archeological sites elsewhere in the park.

Currently accepted models of Native American land use practices, combined with the fact that the National Park Service continues to find prehistoric archeological sites in a wide variety of settings, such as Lake Ozette and in the subalpine zone, lend strong support to the argument that Native Americans used the shores of Lake Crescent. It is likely that the major reason the park has not documented similar sites around Lake Crescent is because very little systematic survey and testing has been done.

Human use of the Olympic Peninsula dates back to the late Pleistocene/Early Holocene, nearly 12,000 years ago, when big game hunters utilized the early post-glacial environment. Evidence from the Manis Mastodon Site near Sequim confirms this and suggests that other areas of the peninsula could have been inhabited as well. While no direct evidence for prehistoric use of the Lake Crescent vicinity currently exists, it is very likely that it was habitable early in the post-glacial period. Since that time Lake Crescent would have provided a place where a variety of plant and animal resources could have been exploited. As such, the potential for the planning area to contain prehistoric archeological remains dating from 10,000-12,000 years ago, all the way up to European contact appears high (Schalk 1988). Archeological potential is expected to be greatest on low-gradient surfaces such as deltas formed at stream mouths, areas with good solar exposure, and in the vicinity of outlet streams such as the Lyre River.

Locating archeological sites within the study area will require intensive archeological investigations using a program of historic research and pedestrian survey. In many cases subsurface probing will be necessary to overcome the limited ground visibility common to the area. The holes are dug by hand and the excavated sediment is placed on tarpaulins until the hole is completed. The pits are then carefully backfilled. Excavation of these holes produces less disturbance than a blown-down tree or many other types of natural disturbance.

Lake Crescent Native American Use

The Klallam Indians' territory encompasses Lake Crescent, as well as the Strait of Juan de Fuca, from Hoko River to Discovery Bay and all tributaries. The Elwha Klallam had settlements along the Elwha River, the Lyre River and Indian Creek, and although there is no explicit evidence of settlements on Lake Crescent, it is probable there were areas of seasonal encampment at least, where several families might gather to obtain seasonal resources at places like Fairholm, Barnes Point, and the outlet of the lake.

The Klallam word for Lake Crescent is Cñłmñt. In Klallam the c sounds something like ts, and the ł sounds similar to lh.

As children, the Klallam were "told to have great respect for Lake Crescent, for it was a lake where many unexplainable things happened" (as told by Sam Ulmer). Occasionally a white whale was seen in the lake; this supported the belief that there was an underground tunnel from the lake to the Strait of Juan de Fuca. If someone saw this whale it was an omen for a good year ahead.

An origin story of Lake Crescent was compiled by the tribe in 1988:

Lake Crescent lies on the north side of the Olympic Peninsula not far from the Strait of Juan de Fuca. The highest mountain overlooking it is Mount Storm King. Many, many years ago, the Klallam people and the Quileute people had a big battle near the shores of the Strait of Juan de Fuca. For two days they fought, from sunrise to sunset. Many warriors on both sides were killed, but neither side would ask for peace.

After watching the bloodshed for two long days, Mount Storm King became angry. On the third day he broke off a great piece of rock from his head and hurled it down into the valley. The rock was so huge that it killed all the men fighting in the valley below him, all the Klallam warriors and all the Quileute.

Through the valley flowed a small river. The rock hurled by Mount Storm King damned up this stream, and soon at the foot of the mountain where the fighting had been fiercest a peaceful lake sparkled in the sunshine. For many generations no Indian ever went to the place where the warriors had been punished by death. Today the Klallam are taught to respect the lake because of what took place long ago. Lake Crescent it is called today, and Mount Storm King mirrored in its clear depths, still looks out across the Straits of Juan de Fuca and over the forest-covered mountains. Mount Storm King guards the crescent-shaped shoreline and the calm blue waters of the lake he made so long ago (Valadez 1988).

Euroamerican Settlement of Lake Crescent

Two fur trappers who later became Olympic Peninsula residents, John Everett and John Sutherland, are credited with exploring the area around Lake Crescent in the early 1860s and originally naming the crescent-shaped body of water Lake Everett. The nearby smaller lake still bears John Sutherland's name. Settlement around Lake Crescent began in the late 1880s. By the early 1890s, John Smith had taken up a claim at Piedmont; John Hanson and his wife Mary Laeger Hanson had homesteaded near the head of the Lyre River; Sarah Barnes and sons Paul and Edward—mother and brothers of Press Expedition member Charles Barnes—had settled on Barnes Point; and a few settlers, including the first Fairholm postmaster, George Mitchell, had homesteaded the west end of the lake. By 1892 there were 15 settlers sited around the lake, but rugged slopes, dense timber, and poor soil made most of the area unsuited to farming.

Lake Crescent formed a water link in the major transportation routes to the west side of the peninsula. Travelers found the lake a pleasant place to break their journey for the night. Other visitors were attracted by the lake's legendary fishing opportunities and its scenic location. As early as the mid-1890s, lodging facilities were established at Piedmont, at the end of a road from the logging community of Port Crescent at Crescent Bay on the Strait of Juan de Fuca, and at East Beach, at the end of the stage road from Port Angeles. During the next two decades, several more resorts were established on Barnes Point and the west and north shores of the lake. Some of the best known were Log Cabin Hotel at Piedmont; Marymere Resort at Barnes Point (which burned circa 1914 and was replaced by Rosemary Inn); Singer's Tavern (Lake Crescent Lodge); Qui Si Sana, a health resort near the present-day Camp David Jr. on the North Shore; and Ovington's, a favorite among anglers.

Early transportation on Lake Crescent was by canoe. The first steam launch, *Lady of the Lake*, began making trips from Piedmont to Fairholm in 1891. Several small private boats operated on the lake during the next 25 years, ferrying passengers to the various resorts and to Fairholm, where guests bound for Sol Duc Hot Springs Resort were met by Stanley Steamers. In 1914-1915, Clallam County began operating the ferries *Marjory* and *Storm King*, which were capable of carrying cars and wagons as well as passengers.

Lake Crescent was included in the Olympic Forest Reserve, established in 1897, and came under U.S. Forest Service administration with the establishment of that agency in 1905. Chris Morgenroth, a Bogachiel Valley pioneer, began working as a forest reserve ranger in 1903. One of his first tasks was to build a trail along the south shore of the lake. Around 1905 he helped construct the Storm King Ranger Station at Barnes Point. In 1921 the Forest Service recognized the recreational value of Lake Crescent by setting aside 16,600 acres around the lake for recreational and scenic purposes, establishing camps and picnic areas, providing a site for the state fish hatchery, and leasing summer home sites.

Chris Morgenroth's trail was widened into a road along the south shore of Lake Crescent in 1922, leading to the end of ferry service on the lake a few years later. In 1931 the Olympic loop highway, U.S. 101, around the peninsula was completed, and resorts and campgrounds around the lake adapted to serving the auto tourist. During the mid-1930s, CCC crews from the Forest Service's Camp Snider constructed a community kitchen, comfort station, and other campground facilities at La Poel campground on the south shore of Lake Crescent.

Along the north shore of the lake, the U.S. Army Spruce Production Division constructed a rail line in 1918 to facilitate the shipment of Sitka spruce logs from west end forests to Port Angeles mills, for the construction of airplanes for World War I. The Spruce Railroad was completed just as the war ended, but it was used as a private logging railroad until the mid-1950s.

During the 1920s, manganese ore was extracted from mines near the western end of Lake Crescent. During World War II, manganese mining activity was renewed, then shut down after the war. During the 1950s additional drilling occurred, but it apparently led to no further major ore production.

In 1938 Olympic National Park was established, following a visit to the Olympic Peninsula by President Franklin D. Roosevelt in the fall of 1937. President Roosevelt spent a night at Lake Crescent Lodge, bringing together members of the state congressional delegation and representatives from the U.S. Forest Service and National Park Service in discussions that helped clear the path for passage of the park enabling legislation. Lake Crescent was included within the boundaries of the new park. In 1946 the park dedication ceremony took place at Rosemary Inn at Lake Crescent. The lake and its remaining resorts have continued to fulfill an essential recreational role for visitors to Olympic National Park.

Archeological remains associated with historic period use of the Lake Crescent area have been documented. These sites relate to a variety of themes including homesteading, transportation and industry, and recreation. Historical archeological sites are expected to be widespread across the study area, and in many cases will lie on the same types of landforms where prehistoric sites are expected.

Historic Structures and Cultural Landscapes

A wealth of information exists about the historic resources and cultural landscapes at Lake Crescent. The information presented in this document provides more general descriptions of these resources. Several other documents contain a greater level of information and include *Four Historic Landscape Studies* (NPS 1984b), the *Historic Structures Report* (NPS 1984c, 1986), *Historic Resources Study* (NPS 1983) and the park's *Resource Management Plan* (NPS 1991b). These documents are available for review at Olympic National Park or the NPS's Columbia Cascades Support Office library in Seattle, Washington.

Lake Crescent Lodge. Originally known as Singer's Tavern, the Lake Crescent Lodge was built in the mid-1910s. In addition to the main lodge, there are several of the original cabins, a one-story, hotel-style building constructed in 1914, and a two-story building that was recently completed. The main lodge and several of the cabins underwent substantial rehabilitation work in 1984, but their appearance changed very little.

The original resort was representative of the country's growing appreciation for the wilderness to be enjoyed in conjunction with modern comforts (NPS 1984b). When it was known as Singer's Tavern, the lodge offered many of these modern comforts including electricity, steam heat, plumbing, strolling gardens with ornamental plants, croquet, bathing, a five-hole golf course, tennis, horseshoes, trapshooting, and boating. It featured formal dining and dancing. A popular destination for residents of the Northwest and British Columbia, it has also attracted more notable figures such as Henry Ford, President Franklin D. Roosevelt, Frank Sinatra, Supreme Court Chief Justice William O. Douglas, and Robert F. Kennedy.

Today, the lodge and the cabins are the most prominent elements of the historic landscape. Some of the original vegetation still remains as well as remnants of the horseshoe field (low stone walls) and the strolling gardens. In 1984, Olympic National Park filed a National Register nomination to create a historic district containing the lodge, all associated buildings, and the surrounding landscape. The district is eligible for the National Register of Historic Places.

Rosemary Inn. Also constructed in the mid-1910s, Rosemary Inn was similar to Singer's Tavern in offering a wilderness setting with modern comforts. In contrast to Singer's Tavern however, Rosemary's reputation was based on its family orientation. The spatial organization was typical of recreational resorts from this era, with a main lodge surrounded by cabins in a forest setting. Like Singer's Tavern, Rosemary had a strolling garden and a central open space. The resort also has a history of being visited by significant persons, mainly elected officials from the state and national levels. President Roosevelt ate breakfast at Rosemary during his visit in 1937. The dedication ceremony for Olympic National Park was held in the central open space.

Today, the lodge and several of the original cabins still exist; five cabins and all of the original outbuildings were either removed or burned. The remaining buildings are examples of fine craftsmanship, constructed over a period of years by a local carpenter, John Daum. Rosemary Inn is representative of the bungalow/craftsman style of architecture. All of the cabins were hand-crafted with local materials and are presently undergoing careful restoration. Both the lodge and a number of the cabins contain original furniture, some of which was made by John Daum. Although only scattered elements of the original landscape remain, Rosemary still retains the essential structure and ambiance of its original setting. It is

currently the campus of the Olympic Park Institute, a private, non-profit organization which offers a variety of educational opportunities focused on the natural and cultural history of the area.

Rosemary Inn was nominated to the National Register of Historic Places in 1978 and was officially added in 1979. The district includes all existing buildings associated with historic resort operations, the central open space and landscaped area, and a narrow, wooded border encircling the site on three sides.

Storm King Ranger Station. The Storm King Ranger Station, also known as the Morgenroth Cabin, built circa 1905, represents the administrative functions of the U.S. Forest Service and the National Park Service. Located at Barnes Point, the cabin was reconstructed in the mid-1980s. It serves as a visitor contact station and administrative office for park rangers at Lake Crescent. The cabin was named after Chris Morgenroth, who was among the first settlers on the Olympic Peninsula and became one of the first rangers for the Olympic National Forest. He was involved in constructing many of the trails in the Olympics as well as in the Lake Crescent area. He oversaw the construction of the Storm King Ranger Station, which exemplifies traditional American frontier architecture utilizing peeled-pole framing, logs, and rough-split cedar shakes.

The cabin was damaged by heavy equipment that broke loose from a truck on nearby U.S. 101 in 1979. During 1983, the highway was realigned, and the cabin dismantled. In 1986, the cabin was reconstructed about 100 yards from its original location, using as much of the original materials as possible. The interior incorporated some of the original building materials, while the exterior was built of new materials. The structure was listed on the National Register of Historic Places in 1981.

Spruce Railroad Trail. The Spruce Railroad trail is representative of the Pacific Northwest's contribution to World War I, as described above. Today, the railroad grade is a reminder of this past effort; remnants include cribbing, rockwork, and two tunnels, all of which illustrate historic engineering methods. Following the old railroad grade for most of the way, the trail offers visitors relatively easy terrain for hiking, horseback riding or mountain biking (eight miles round-trip). It starts just south of the Lyre River along the Lyre River Road and connects to the North Shore Road one mile east of the North Shore picnic area. It is eligible for the National Register of Historic Places.

Archeological Sites and Ethnographic Resources

There has been limited archeological survey and ethnographic research conducted in the Lake Crescent area. Initial investigation indicates that ethnographic data and traditional cultural properties may be limited in scope. There is a great potential for archeological sites, both historic and prehistoric. The following describes the specific potential for each management area.

Barnes Point. Barnes Point represents one of the largest low-gradient surfaces within the planning area. As such, it has a high potential for containing archeological resources.

Barnes Creek is the largest tributary to the lake making it a likely spot for Native American fishing stations. Prior to its separation from Lake Sutherland and Indian Creek, it is thought that Lake Crescent was accessible to several species of anadromous fish (cutthroat trout, steelhead, and sockeye salmon). It is likely that resident and anadromous trout used Barnes Creek as a spawning area. Resident trout continue to

use Barnes Creek for spawning. Spawning fish in Barnes Creek, as well as in other tributaries, and the lake itself, would be a real draw for humans in the area. In addition to fishing, Barnes Point may have been a good area for hunting large ungulates such as deer and elk. Given these factors, it is likely that campsites and resource extraction sites possibly dating back to the early Holocene (10,000 years ago) may be present in this area. Sites representing these uses are expected to be manifested as scatters of lithic tools and chipping debris, possibly associated with fire-cracked rock.

The Barnes Point vicinity also has a long record of historic use and thus a high potential for historical archeological remains. Sites representing the themes of recreation, homesteading, and government are expected to be present. One historical artifact scatter has been identified within the Lake Crescent Lodge historic district.

Fairholm. The Fairholm vicinity is seen as having high potential for both historic and prehistoric archeological remains. Expected site types include Native American camps or resource extraction localities manifested as lithic tool and chipping debris scatters; bark-peeled trees, especially western redcedar; and a variety of historical archeological sites related to recreation and industry. These latter site types may include domestic and commercial refuse dumps and construction camps and features associated with the Spruce Railroad.

Log Cabin. Log Cabin Resort, located on the eastern end of Lake Crescent, appears to have good archeological potential for both historic and prehistoric archeological sites. Several homesteads were located in the vicinity and its relatively good solar exposure and proximity to the Lyre River make it a likely spot for Native American sites.

La Poel. The La Poel area shows signs of extensive historical use and modification. Dominant historical themes include recreation (lodge) and government (CCC). These activities are expected to be manifested archeologically in the form of refuse dumps and a variety of landscape features. Although its location on the south side of the lake gives it poor solar exposure, the presence of a stream entering here suggests at least some potential for prehistoric sites.

East Beach. East Beach is located on a small protected bay near the park boundary. While flat ground is limited, there may be potential for prehistoric archeological remains owing to its position near the pass between Lake Crescent and Lake Sutherland. Historical archeological remains associated with early recreational use or homesteading may also be expected.

North Shore. Development plans for the North Shore area focus on projects related to the Spruce Railroad grade. This extensive, early twentieth century engineering feature runs along the length of the lake's north shore and is clearly eligible for inclusion in the National Register of Historic Places. It is expected that historical archeological sites related to the railroad are located within the project area. Additionally, at least one known homestead site is located adjacent to the railroad near the outlet of the Lyre River. The area around the Lyre River is also thought to have a high potential for prehistoric archeological sites as well. Other areas of concern include low-gradient surfaces near the western end of the lake where prehistoric sites may be expected as well as historical archeological sites related to railroad construction, early logging, and recreational activities.

RECREATION RESOURCES

Scenic Resources

The Lake Crescent watershed offers an abundance of scenic resources; from the lake itself to the surrounding mountains, forests and clearings. Dramatic views of Mount Storm King, Pyramid Mountain, and forested ridgelines define the watershed. From high on Mount Storm King and Pyramid Mountain visitors can find sweeping views of the watershed and Olympic Mountains. The Barnes Creek drainage contains exceptional examples of old-growth trees, as well as access to Marymere Falls. Wildlife, especially deer, is observed occasionally. Perhaps the most significant scenic resource is the lake itself, nestled in a deep glacial valley surrounded by steep, forested hillsides. Visitors and landowners alike are impressed by the clarity and hue of the water.

The forest within the watershed is largely uninterrupted by clearings or development. A lodge, ranger station and other visitor facilities are located on Barnes Point on the south shore, while another lodge is situated along the north shore near the mouth of the Lyre River. Fairholm store and campground are located at the western end of the lake. Private residences dot the shoreline along the north shore, west of Bovee's Meadow, and between East Beach and the mouth of the Lyre River. The forest immediately outside the park boundary above the Piedmont/Lyre River area at the eastern end of the lake is disrupted by a large clearcut easily seen from within the watershed. Because lands adjacent to Olympic National Park are actively managed for timber production, clearcuts are visible from U.S. 101 on both the east and west approaches to Lake Crescent.

Visitor Use Patterns and Trends

Visitation patterns and trends are recorded in the park's Monthly Public Use Report, which tracks visitation for each district and facility, as well as for the park as a whole. Information compiled from these reports is presented in Appendix B.

Use of Olympic National Park in general and the Lake Crescent area specifically are expected to increase, based on the following trends:

- The annual visitation to Olympic National Park has increased steadily since the park's designation in 1938. During the ten-year period from 1987 to 1997, annual visitation rose 33 percent, from 3,362,535 in 1987 to 5,023,302 in 1997.
- During the same period, visitation to the Lake Crescent District (which includes day and overnight use both at Lake Crescent and Sol Duc visitor areas) increased from 1,799,673 in 1987 to 2,842,758 in 1997, an increase of 36 percent.
- From 1988 to 1996, occupancy levels at both Lake Crescent Lodge and Log Cabin Resort have increased as well, by 20 percent at Log Cabin and three percent at Lake Crescent Lodge.

In addition to these statistics, observations by park staff over the years indicate increased use of trailheads, picnic areas, parking lots and other day-use facilities and areas. Along with the rest of Olympic

National Park, Lake Crescent receives its heaviest use during the summer months, when weather conditions are more conducive to outdoor recreation. The lake is popular for both day users and those staying overnight. Annual records for the two resorts show occupancy rates in excess of 90 percent for each July and August since 1988; in fact, for most summers during this period, occupancy rates have exceeded 95 percent (NPS unpublished report). Occupancy of Fairholm campground fluctuates from year to year, with the greatest use occurring on summer weekends during periods of fair weather, when the campground is typically full (Dan Mason, pers. comm.).

Off-season use is fairly limited. Camping and lodging facilities and other concession operations either close down completely or scale back their operations during the winter months.

No visitor use surveys have been conducted for the Lake Crescent area to determine visitor use patterns. However, a *tourism market analysis* was commissioned by the North Olympic Visitor and Convention Bureau and revealed useful information regarding visitor use patterns on the North Olympic Peninsula (Dean Runyan Associates 1995). This study was conducted using surveys as a basis for assessing visitor demographics and visitation trends and for developing recommendations for enhancing tourism on the peninsula. The findings of this study, some of which are presented below, are relevant to policy development for managing uses in the Lake Crescent area.

Visitor Origin. The majority of visitors surveyed in the *Tourism Market Analysis, North Olympic Peninsula* came from the Pacific region (Washington, California and Oregon) of the United States, with the majority coming from the state of Washington. Within Washington, the largest number of visitors were from the Seattle metropolitan area, with substantial numbers from Everett, Tacoma, and Olympia (Dean Runyan Associates 1995).

Main Attractions. Most people visiting the North Olympic Peninsula, either for the first time or as a repeat visitor, are drawn to its outdoor attractions and recreation opportunities. Over 75 percent of the visitors surveyed during the summer traveled to Olympic National Park or other scenic locations on the peninsula; the percentage rose to 84 percent among visitors surveyed in the fall (Dean Runyan Associates 1995).

Length of Stay. Most of the visitors surveyed stayed overnight on the North Olympic Peninsula, with the average length of stay approximately two nights. This indicates that the area is most often used as a destination for relatively short trips, or as a stopover as part of a longer trip (Dean Runyan Associates 1995). This is consistent with the average length of stay at Lake Crescent Lodge and Log Cabin Resort.

Party Size. According to the *Tourism Market Analysis, North Olympic Peninsula*, the most common travel party to the North Olympic Peninsula is comprised of two people. A majority of summer travel parties include children (three out of five parties included at least one child). This proportion drops substantially in the fall, when nearly 70 percent of travel parties do not include children (Dean Runyan Associates 1995).

Recreational Opportunities

A number of recreational opportunities are available in the Lake Crescent area, including hiking, swimming, fishing, sight-seeing, and boating. The following discussion identifies existing recreational opportunities within the area.

Day-Use Areas. Day-use areas include designated swimming beaches and picnic areas. Designated swimming beaches include Fairholm, Bovee's Meadow, and East Beach. Based on ranger observations, East Beach and Bovee's Meadow receive the heaviest use of the three swimming beaches. During the summer months, both areas can be congested as evidenced by overflow parking along access roads. At Fairholm, parking for approximately 15 boat trailers is provided in a large parking lot between the campground and the store; this lot is often full during the summer months. Picnic tables are available at Fairholm, Bovee's Meadow, and East Beach, in addition to the North Shore picnic area and La Poel. The North Shore picnic area is not heavily used, even though it is readily accessible by car and boat.

Water Recreation. Lake Crescent offers a variety of water-oriented recreational activities. The lake is a popular summer destination for users of both motorized and non-motorized boats. Popular activities include use of personal watercraft, water-skiing (including skis, tubes, aquaplanes, and kneeboards), canoeing, kayaking, sailing, sight-seeing and windsurfing. Ramps for trailered boats are provided at Fairholm, Barnes Point, and Log Cabin. Boat fueling facilities are provided at Fairholm.

The park's *Water Safety Plan* (NPS 1994) serves as an operational guide for all watercraft on Lake Crescent. State and federal boating regulations are followed in the plan. At the present time, there are no restrictions on speed limits, with the exception of the 50-yard no-wake zone paralleling the shoreline of the entire lake. In addition, areas of the lake immediately adjacent to Fairholm, Barnes Point, Bovee's Meadow, East Beach, Log Cabin Resort, and the Lyre River are buoyed as "no-wake" zones.

Lake Crescent also provides a popular recreational fishery for visitors and local sportsmen. The lake contains unique, locally adapted rainbow and cutthroat trout populations known as the Beardlee and Crescenti, respectively. All fish in the lake are resident, non-anadromous populations. Beginning in 1994, the minimum size limit was increased from 12 to 20 inches for both species to achieve a higher level of spawning escapement, allowing a greater number of fish to spawn.

Hiking. Several hiking trails provide access to destinations within the Lake Crescent watershed as well as access into the backcountry. One of the most accessible trails is the Barnes Creek trail, which originates at the Storm King Ranger Station, and provides access to Marymere Falls, Mount Storm King, Baldy Ridge, and the Happy Lake Ridge trail. Trails on the north side of Lake Crescent include the Pyramid Mountain trail, with access from the North Shore Road, and the Spruce Railroad trail, which follows an old railroad grade (hence the name). Trail difficulty and distances are shown in the following table.

AFFECTED ENVIRONMENT

| Trails | Distance (round-trip) | Terrain |
|-------------------------|---------------------------------|---|
| Spruce Railroad Trail | 8 miles | Moderate grade; no steep hills |
| Marymere Falls | 2.2 miles (from ranger station) | Level grade with a short steep climb to the falls |
| Pyramid Mountain | 7 miles | Steep grade |
| Mount Storm King | 6.2 miles | Steep grade |
| Happy Lake Ridge access | 15.2 miles | Moderate; steep climb to ridge |
| Barnes Creek Trail | 18.6 miles | Moderate; steep climb to ridge |
| Moments in Time Trail | 0.6 mile | Flat; accessible with assistance |

Camping. Fairholm campground provides the only NPS camping facilities within the Lake Crescent area. A campground once existed at La Poel, but was closed following construction of the Fairholm campground. La Poel is now used as a day-use area for picnicking and sometimes serves as an overflow campground when the Fairholm campground is full.

Fairholm campground has 87 campsites which are available for tents and RVs. Signs posted at the campground entrance warn RVs over 32 feet in length about sharp corners and steep grades that may be difficult to negotiate. Campground amenities include vehicle pull-in sites, restroom facilities, picnic tables, and fire grates. An amphitheater is located west of the campground and is used as staffing is available for interpretive and educational programs during the summer months. In recent years, Fairholm campground has been open from February through October and most heavily used in July and August. Off-season use is typically limited to weekends.

Educational Programs. In recent years, educational programs have included evening campfire programs at Fairholm campground, Lake Crescent Lodge and Log Cabin Resort, and guided walks along the Spruce Railroad trail and the Marymere Falls trail. Visitor orientation services are available at the staffed information desk at the Storm King Ranger Station. All of the aforementioned services are offered during the summer months only and as staffing is available.

An interpretive boat tour was offered through a park concession during the summers of 1994 through 1996, but is no longer available. Re-establishment of a boat tour is possible in the future.

Three interpretive wayside signs are located along U.S. 101. These waysides, located at Sledgehammer Point and Wallace Point, help visitors understand the natural and cultural history of the lake.

Several self-guided interpretive trails are available at Lake Crescent. At Barnes Point, the 0.6-mile long "Moments in Time" trail provides interpretive wayside exhibits about the Lake Crescent area. Self-guiding interpretive trail leaflets are available at leaflet dispensers at trailheads for the Marymere Falls trail at Barnes Point and for the Spruce Railroad trail on the North Shore.

CONCESSION OPERATIONS/NON-PROFIT ORGANIZATIONS

Fairholm General Store and Cafe

The Fairholm General Store and Cafe, situated immediately adjacent to U.S. 101, is owned by the National Park Service and operated by Crescent West, Inc. under a concession contract. The store/cafe's operating season is April through October. It provides breakfast, lunch and snacks at the cafe and groceries, souvenirs, camping and fishing supplies, boat rentals, and boat gas at the store. Limited parking is available beside the store and adjacent to U.S. 101, with additional parking located behind the store. A short path provides access to the beach from the store and descends a relatively steep grade.

Lake Crescent Lodge

Lake Crescent Lodge is owned by the National Park Service and operated under contract by National Park Concessions, Inc. The lodge is open from April to the end of October, with some lodging available by reservation during the off-season. This facility offers several rooms in the main lodge, two motel-type buildings, and several cabins. The main lodge also houses a restaurant, cocktail lounge and gift shop. Boat rentals are available to guests.

Log Cabin Resort

Log Cabin Resort is operated by Log Cabin Resorts, Inc. under a concession contract with the National Park Service. Most of its facilities are owned by the National Park Service, while some are privately owned by the resort operators. The resort is open from mid-winter through fall, and is closed for some of the winter. Rooms are available in the main lodge, along with several cabins and A-frame units. Overnight parking, with electrical hook-ups, is available for RVs. In addition to overnight accommodations, the resort offers a dining room and snack bar, a marina, boat rentals, laundry facilities, and a small grocery and gift shop.

Olympic Park Institute

The Olympic Park Institute (OPI) is a private, non-profit organization offering educational programs focused on the natural and cultural history of the Olympic Peninsula. The operation is based at Rosemary Inn, an historic inn on Barnes Point built in 1914.

Olympic Park Institute offers a variety of educational programs, including field seminars, field science programs for school students, and programs for senior adults through Elderhostels, Inc. The institute also provides conference services. Approximately 5,000 people participated in OPI programs in 1996.

Overnight accommodations for program participants are provided at the Institute. Six cabins furnish space for approximately 140 students or about 50 adults. An on-site kitchen provides meals for program participants.

Olympic Park Institute is a member campus of Yosemite National Institutes and operates under a cooperative agreement with the National Park Service.

TRANSPORTATION

Traffic Patterns and Volumes

Olympic National Park is the largest tourist attraction on the Olympic Peninsula, with U.S. 101 serving as the primary travel route on the peninsula. In addition to tourism-related traffic, U.S. 101 is heavily used by local travelers, including commuters, residents and commercial vehicles. It is also a popular route for cyclists.

The majority of visitors approach Olympic National Park from the east, through Sequim and Port Angeles. Traffic volumes on the North Olympic Peninsula, including U.S. 101 around Lake Crescent, vary considerably according to season. Both the volume of traffic and the percentage of cars (as opposed to truck traffic) are higher during the summer months (WSDOT 1997a). In 1997, August's total monthly travel on U.S. 101 around Lake Crescent was 54 percent higher than January's monthly total (NPS 1997b).

There are no reports of serious delays on U.S. 101 along Lake Crescent, although some vehicles may travel slower than the posted speed limit, sometimes leading to long lines of traffic, especially during the summer months. The presence of bicycles can cause temporary congestion along the road.

U.S. 101, as it passes Lake Crescent is a narrow and winding two-lane road. In many places, there are no shoulders. The established speed limit along most of the lake is 35 mph, although it is often exceeded by motorists. Limited sight distance along much of this section of road, along with narrow or non-existent shoulders combine with the mix of motorized and non-motorized traffic to cause significant safety concerns. Signs posted at each end of the lake notify cyclists of the potential hazards of cycling along this section of U.S. 101. These signs are also posted at public transit stops offering cyclists an alternate, safer means of travel.

At present, there are no plans to widen this section of U.S. 101; alternate bicycle routes were explored and analyzed by the Washington State Department of Transportation in the *Lake Crescent Alternatives Analysis*, released in November 1997. Additional information about this analysis is provided in the following section.

Current Transportation Planning

Several planning projects have targeted the Olympic Peninsula within the last few years, developed in response to the requirements of the State Growth Management Act. Each of these documents was considered in the development of the *Lake Crescent Management Plan*.

Washington's Transportation Plan (formerly known as the Statewide Multimodal Transportation Plan). The *Washington's Transportation Plan* establishes policy, objectives, and strategies for maintaining, preserving and improving state highways, the ferry system, state-owned airports, public

transportation, intercity passenger rail, freight rail, marine ports and navigation, and non-motorized transportation. The plan identified a long-range, 20-year list of improvement needs for U.S. 101, including widening existing shoulders to accommodate bicyclists and adding passing lanes, climbing lanes, developing rest areas, and improving pavement conditions.

State Highway System Plan. A component of the *Washington's Transportation Plan*, the *State Highway System Plan* provides service objectives and action strategies for maintaining, operating, preserving, and improving Washington's state highways, including U.S. 101.

Lake Crescent Alternatives Analysis. Sponsored through an ISTEA (Intermodal Surface Transportation Efficiency Act) grant and the WSDOT Heritage Corridors Program, this analysis identified short- and long-term recommendations for safe non-motorized travel around Lake Crescent. The short-term recommendation is to install flashing warning signs on U.S. 101 at each end of the lake. The warning signs would be button-activated by cyclists as they enter the lake area, and would operate on a timer, notifying motorists that cyclists are on that section of U.S. 101 when the lights are flashing.

The long-term preferred alternative is to make improvements to the north shore of Lake Crescent to better accommodate bicyclists, pedestrians and equestrians. Four priority areas have been identified for improvements, including the Spruce Railroad grade, as well as existing roads on the north side of the lake. The proposals outlined in the *Lake Crescent Alternatives Analysis* are consistent with the NPS proposed action (Alternative A) presented in this plan.

Peninsula Regional Transportation Plan. This plan was prepared by the Peninsula Regional Transportation Planning Organization in 1995. The continuing goal of this organization is to coordinate regional transportation planning activities for the Olympic and Kitsap peninsulas. This study forecast future traffic volumes and identified future transportation projects and programs to meet the operational goals of the plan. The plan also addressed multimodal transportation needs of the area regarding tourism, freight, non-motorized uses, transit, and ferry travel.

The Washington Coastal Corridor: U.S. 101 Corridor Master Plan. This plan, completed in 1997 by the Washington State Department of Transportation, serves as a guidebook for managing the U.S. 101 right-of-way. Its goal is to facilitate a world-class traveling experience while balancing the needs of communities and the general public who rely upon the corridor.

LAND USE AND OWNERSHIP

At the time Olympic National Park was created, approximately half of the lakeshore was held in private ownership. Much of this land was divided into a large number of smaller parcels for homes and resorts (455 parcels in all). Over time, the National Park Service acquired approximately one-half of the privately held lands. An additional 3,680 acres of private inholdings were obtained through a timber salvage exchange program from 1953 through 1957.

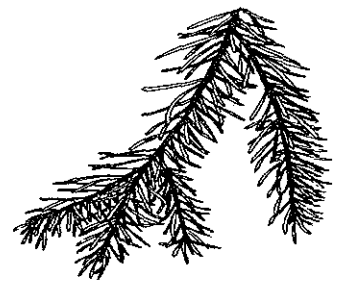
The park's *Land Protection Plan*, adopted in 1984, established priorities for acquisition of privately held lands. In accordance with current Department of the Interior policy, in the absence of incompatible threats, acquisition will be done only when a willing seller, willing buyer situation exists. The park will remain

AFFECTED ENVIRONMENT

aware of general trends in development, loss of vegetation, increase in sewage and water usage as it relates to fisheries management, natural processes and possible conflicts with visitation patterns.

Currently there are 106 tracts in private ownership, totaling approximately 117 acres. Occupancy varies from year to year. The majority of use is seasonal and on weekends.

Lands surrounding the Lake Crescent watershed are under public and private ownership. The majority of land adjacent to the park boundary is managed by private companies or the Washington State Department of Natural Resources. The remaining portion is under the management of the U.S. Forest Service. These lands are used predominantly for timber production.



Environmental Consequences

ENVIRONMENTAL CONSEQUENCES

BACKGROUND

The purpose of this plan is to guide management of the Lake Crescent area for the next 10-15 years. Since the plan does not provide detailed site designs for any given management area, but instead proposes a general direction for visitor use and resource protection throughout the watershed, a general analysis of environmental impacts is provided. Consequently, as site plans are developed for specific locations and proposed projects are scheduled for implementation, detailed environmental analysis and documentation would be provided, as needed. This would include obtaining all necessary permits and approvals from state and federal regulatory agencies. The following analysis is based on the best information available.

EFFECTS FROM ACTIONS PROPOSED IN ALTERNATIVE A: THE PROPOSED ACTION

NATURAL RESOURCES

Air Quality

Construction projects proposed in this alternative would have short-term effects on air quality in the Lake Crescent watershed. There would be exhaust emissions from the gasoline and diesel engines of heavy equipment used to construct:

- Additional parking at Fairholm store, Log Cabin, East Beach, and Spruce Railroad trailheads
- Relocation of Fairholm store
- Reconfiguration of Fairholm campground and removal of lakeshore campsites
- Installation of above-ground fuel tanks at Fairholm and Log Cabin
- Reconstruction of boat docks at Fairholm and Log Cabin
- Repair or replacement of existing dock at Lake Crescent Lodge
- Possible expansion of Lake Crescent Lodge
- Accessible restroom at Bovee's Meadow
- Accessible toilets at East Beach, North Shore picnic area, and Spruce Railroad trailheads
- Redesign and relocation of Log Cabin Resort buildings
- Replacement of some Log Cabin RV campsites with cabins
- Spruce Railroad multi-purpose trail
- Bicycle lanes along East Beach, Piedmont, and Lyre River roads

Construction activities would likely release moderate amounts of dust into the air. Widening of the Spruce Railroad trail to accommodate multiple trail uses could have a more noticeable effect on air quality due to the rock cuts and excavation needed to widen portions of the trail at both tunnel locations. Although air quality would be impaired in the immediate vicinity of construction sites, these impacts would be temporary; conditions existing prior to construction could be expected to return once projects are completed.

Conclusion. Since pollution sources would be temporary, localized, and of small magnitude, there would be no adverse effect on air quality or related values in the Lake Crescent watershed. Overall, it is expected that diminished air quality would have no effect on human health and would result only in minor and temporary impairment of visibility.

Cumulative Effects. Although implementing elements of the proposed action would cause an increase in airborne pollutants over existing levels, these increases would be localized, short term, and insignificant in relation to the park and region's overall air quality and related values. The increase in airborne pollutants would not exceed national ambient air quality standards or allowable Class I increments.

Wilderness

None of the actions proposed in this alternative would have a direct impact on the surrounding Olympic Wilderness. However, the use of motorized watercraft and vehicles, and the presence of visitor facilities around the lake, would continue to provide a visual and audible reminder of human influence on the landscape. Although it is not anticipated that such intrusions would be noticeably increased under this alternative, they may detract from the wilderness experience of some visitors.

Conclusion. Although none of the proposed actions would have a direct impact on the Olympic Wilderness, indirect impacts such as noise and viewshed impairment in the Lake Crescent area may detract from the wilderness experience of some visitors.

Cumulative Effects. Human activity in the Lake Crescent area may degrade the quality of the wilderness experience for those users within sight and sound of Lake Crescent. However, no significant cumulative impacts on wilderness are anticipated since human intrusions at Lake Crescent would not be noticeably increased over existing conditions, and in fact, may be decreased due to the ban on PWC use.

Water Resources

Several actions have been proposed specifically to alleviate a perceived water quality impact resulting from siltation and disturbance of creek and lake bottom sediments at a facility or as a result of a particular activity:

- Removal of lakeshore campsites at Fairholm
- Obliteration/revegetation of social trails between Bovee's Meadow and Barnes Creek
- Relocation of La Poel picnic sites away from creek
- Elimination of some RV sites at Log Cabin

Other proposed projects are intended to alleviate a recreational conflict, to alter the scope of activities at a site or reduce the amount of visitor use in an area. Implementing these projects would have an indirect, beneficial effect of removing an existing or potential source of water pollution that could result in siltation, disturbance of lake bottom sediments, or oil and gas spills:

- Removal of underground fuel tank at Fairholm
- Reconfiguration of Fairholm campground and removal of lakeshore campsites
- Redesign and relocation of Log Cabin Resort buildings

Most concerns regarding impacts on water quality relate to the construction phase of projects. Water quality can be protected to a large extent by avoiding construction during the heavy rain season and through the use of proper construction techniques and procedures to keep silt out of stream drainages and the lake. Runoff from parking areas can be mitigated by good design.

There is a possibility that runoff from construction sites for the following projects could cause short-term siltation of the lake:

- Additional parking at Fairholm store, Log Cabin, East Beach, and Spruce Railroad trailheads
- Relocation of Fairholm store
- Reconfiguration of Fairholm campground and removal of lakeshore campsites
- Possible expansion of Lake Crescent Lodge
- Redesign and relocation of Log Cabin Resort buildings
- Replacement of some Log Cabin RV campsites with cabins
- Bicycle lanes along East Beach, Piedmont, and Lyre River roads

The following project, which involves asphalt paving, could have direct and indirect effects on water quality in the Lake Crescent watershed:

- Reconfiguration of Fairholm campground

Precipitation runoff mixed with pollutants from asphalt pavement could reach the lake via surface and groundwater flows, though with good design, this effect can be mitigated to a large extent by construction of catchment basins to separate oil from water. Pavement also prevents normal percolation of water into the ground, thus increasing surface flow. Because grades in the area are uniformly steep and few options exist for road realignment, approximately 0.1 acre of undisturbed habitat would be affected; however, any additional paving would contribute cumulatively to the concern for alteration of natural hydrology.

Construction of the following boating facilities would have short- and long-term effects on water quality:

- Reconstruction of boat docks at Fairholm and Log Cabin
- Repair or replacement of existing dock at Lake Crescent Lodge

During construction, there would be short-term siltation and disturbance of lake bottom sediments at the above project sites. Over the long term, boat fueling and the potential for fuel spills would likely increase since improved boating facilities (e.g., new boat ramps, docks, additional parking for boat trailers) could encourage an increase in the overall amount of boating usage on the lake.

None of the proposed actions would result in permanent changes to floodplains or have an adverse effect on wetland functions or values.

Conclusion. Increased levels of pollutants from parking lot runoff, siltation during construction, and fuel spills and emissions from increased levels of boating could potentially decrease the overall water quality of the lake. However, mitigation measures would be employed to ensure that water quality and other habitat values are not adversely affected.

Cumulative Effects. Any new source of water pollution, regardless of how small or how well mitigated, contributes to the cumulative, incremental decline of water quality in the Lake Crescent watershed. In addition, every new construction project that adds to the total land base devoted to development subtracts from the amount of undeveloped land that is subject to natural hydrologic processes.

Geology and Soils

Several construction projects proposed in this alternative would have long-term effects on soils, though in every case, there has been some type of prior disturbance at the project site. (The nature of the previous disturbance is noted in parentheses):

- Additional parking at Fairholm store (developed site)
- Relocation of Fairholm store (developed area)
- Reconfiguration of Fairholm campground (developed area)
- Installation of above-ground fuel tanks at Fairholm and Log Cabin (previous disturbance)
- Accessible restroom at Bovee's Meadow (previous disturbance)
- Accessible toilets at East Beach, North Shore picnic area, and Spruce Railroad trailheads (previous disturbance)
- Redesign and relocation of Log Cabin Resort buildings (developed area)
- Replacement of some Log Cabin RV campsites with cabins (developed area)
- Additional parking at Log Cabin (previous development)
- East Beach parking, short-term improvements (reconfiguration of existing parking area)
- East Beach parking, long-term improvements (previous logging activity)
- Possible expansion of Lake Crescent Lodge (developed site with previous disturbance)
- Parking at east and west trailheads of Spruce Railroad trail (previous disturbance)

Although the above projects represent a permanent alteration to the existing soil structure on these sites, there would be no cumulative change in the total undisturbed acreage committed to development. The combined area of impact for all the above projects is approximately 3-4 acres of previously disturbed ground.

Widening of the Spruce Railroad trail to accommodate multiple trail uses would have a pronounced effect on geologic and soil resources. Parts of the original railroad were cut into steep rock cliffs, with two tunnels dug where required by terrain. These tunnels have been closed and it is infeasible to reopen them for trail use. Widening the present trail for horses, bicycles, wheelchairs and pedestrians would require cutting into undisturbed rock and soils at the two tunnel locations, creating potentially extensive cut slopes that would leave a noticeable scar.

Widening and excavation would not be required where the trail is located on the 12-foot wide railroad grade. Where the trail must leave the railroad grade, widening would be necessary, and require excavation

in some instances, such as the approximate 400 linear feet of trail cut into the slope above the railroad grade approximately 0.5-mile west of the eastern trailhead. Excavation would also be required in constructing short access trails above the North Shore Road at the North Shore picnic area and at Fairholm, but the cut slopes in these areas would not be severe, as the soils are much more stable than the loose material at the entrances to the tunnels. The total area of new trail surface would be about one acre, most of which is located on the former railroad right-of-way.

Soil compaction restricts the ability for surface water to infiltrate into the ground, which may exacerbate erosion problems. Compacted soils also reduce the movement of oxygen through the soil for plant uptake and result in the loss or declining health of vegetation. Additional site planning at management areas around the lake coupled with proposals to obliterate and revegetate social trails in heavily used areas such as Bovee's Meadow and Barnes Creek would help decrease soil compaction and erosion that presently occurs. Construction of new trails and rehabilitation of existing trails would further reduce the potential for soil impacts by channeling visitor use along properly designed and maintained trails.

There are no known active seismic faults or other geologic hazards affecting the proposals in this alternative.

Conclusion. Approximately 3-4 acres of previously disturbed soils would be impacted by construction of new facilities. Although these projects represent a permanent alteration to the existing soil structure, there would be no cumulative change in the total undisturbed acreage committed to development. Widening of the Spruce Railroad trail, however, could have a more pronounced effect on undisturbed soils. The total area of new trail surface would be about one acre, most of which is located on the former railroad right-of-way. At the two tunnel locations, the amount of excavation required to achieve a stable cut slope would leave a noticeable scar. Many of the actions proposed in this alternative, including detailed site and trail planning, would help mitigate impacts caused by visitor use.

Cumulative Effects. The cumulative change in the total undisturbed acreage at Lake Crescent being newly committed to development would be about one acre. This acreage is located along the former Spruce Railroad right-of-way.

Vegetation

Vegetation would be affected by nearly every project proposed in this alternative, although in all cases, areas disturbed by construction would be revegetated and landscaped or restored to natural conditions to the extent possible. Some projects would affect vegetation at sites where disturbance has previously occurred and is perpetuated by maintenance practices. Other projects would occur in areas that, though disturbed in the past, have now restored themselves to present a somewhat natural appearance.

The following projects would occur on previously disturbed sites where vegetation has been substantially altered and where the changes have been maintained. At these sites, maintenance practices and visitor uses have kept the native vegetation from becoming reestablished. Road shoulders are mowed, vistas are kept open, trampling occurs, and vegetation is manipulated to control exotic species.

- Bicycle lanes along East Beach, Piedmont, and Lyre River roads

ENVIRONMENTAL CONSEQUENCES

- Possible expansion of Lake Crescent Lodge
- Accessible restroom at Bovee's Meadow
- Accessible toilets at East Beach, North Shore picnic area, and Spruce Railroad trailheads
- East Beach parking, short-term improvements (reconfiguration of existing parking area)

At many of the project sites listed below, native vegetation has begun to reestablish itself, either by natural processes or through active programs of replanting native species while eliminating exotic (nonnative) plants. Construction at these sites would have a substantial effect on recovering vegetation, both scenically and ecologically. Visual scars from previous construction or prior uses would be reopened. Ecological processes of succession would be interrupted and set back. As part of every construction project, the unavoidable removal of vegetation could be somewhat mitigated by landscaping and replanting with native vegetation:

- Relocation of Fairholm store
- Reconfiguration of Fairholm campground
- Additional parking at Log Cabin
- East Beach parking, long-term improvements (construction of upper parking lot)
- Spruce Railroad multi-purpose trail

One project, obliterating and revegetating the social trails between Bovee's Meadow and Barnes Creek, recognizes an ongoing problem with informal shoreline trails and the harmful effects on shoreline plants. Elimination of social trails and construction of new trails would further reduce the potential for vegetation impacts by channeling visitor use along properly designed and maintained trails and revegetating disturbed sites with native species.

The following actions would make it possible to restore native vegetation and ecological processes to some presently developed areas:

- Reconfiguration of Fairholm campground and removal of lakeshore campsites
- Redesign and relocation of Log Cabin Resort buildings

However, failure to rehabilitate disturbed sites with an active and ongoing revegetation program using native plants and seeds could have the effect of providing favorable conditions for the invasion of exotic plants and noxious weeds that flourish in disturbed sites around Lake Crescent.

Conclusion. Actions proposed in this alternative would continue to expand the trend away from natural vegetative processes. More acreage of undisturbed and formerly disturbed vegetation would be permanently converted to recreational development. Some landscapes would cease to be the product of natural processes and would be maintained as manipulated sites. Construction of new facilities would disturb or eliminate vegetation from 3-4 acres of previously altered terrain. Approximately one acre of presently undisturbed vegetation would be lost due to construction of the Spruce Railroad trail. To help mitigate impacts, disturbed areas would be revegetated with native species and restored to natural conditions to the extent possible.

Cumulative Effects. The effects on vegetation are cumulative in that there is already substantial recreational, transportation and residential development at Lake Crescent. This alternative would continue

to expand the trend away from natural vegetative processes by eliminating vegetation from nearly 5 acres, only one acre of which involves previously undisturbed terrain.

Wildlife

Prior to undertaking any proposed action, an assessment of its effects on endangered, threatened, proposed, and candidate animal species would be conducted, with consultation with the U.S. Fish and Wildlife Service as necessary. Protection of these species would receive highest consideration in project planning.

Aquatic habitat and wildlife species would benefit from the following proposed actions:

- Removal of lakeshore campsites at Fairholm campground
- Relocation of La Poel picnic sites away from creek
- Redesign and relocation of Log Cabin Resort buildings
- Elimination of some RV camping at Log Cabin
- Ban on PWC use lakewide

Juvenile trout use the nearshore environment as rearing areas in their first year. Though difficult to quantify, it is likely that removal or reduction of shoreline facilities and activities would have a beneficial effect on fish, especially if the shoreline were restored to a more nearly natural condition.

The effects of construction on known wildlife populations would be primarily due to disturbance of individual animals and loss of additional habitat. The following projects would likely cause disturbance to wildlife from noise and human presence during actual construction:

- Additional parking at Fairholm store, Log Cabin, East Beach, and Spruce Railroad trailheads
- Relocation of Fairholm store
- Reconfiguration of Fairholm campground and removal of lakeshore campsites
- Installation of above-ground fuel tanks at Fairholm and Log Cabin
- Reconstruction of boat docks at Fairholm and Log Cabin
- Repair or replacement of existing dock at Lake Crescent Lodge
- Possible expansion of Lake Crescent Lodge
- Accessible restroom at Bovee's Meadow
- Accessible toilets at East Beach, North Shore picnic area, and Spruce Railroad trailheads
- Relocation of La Poel picnic sites away from creek
- Redesign and relocation of Log Cabin Resort buildings
- Replacement of some Log Cabin RV campsites with cabins
- Spruce Railroad multi-purpose trail
- Bicycle lanes along East Beach, Piedmont, and Lyre River roads

Possible effects of construction noise and other activity on wildlife would depend on such variables as the location, nearness of the construction site, time of year and species affected. Most animals would be expected to avoid these areas during construction and may abandon nests or dens if construction occurred during critical phases in their breeding cycles. In some instances, permanent displacement of individuals could occur due to the loss of nesting or denning sites, roost sites, protective cover, or a decline of food

ENVIRONMENTAL CONSEQUENCES

sources. For the most part, however, construction impacts would be short term and minor. Timing of construction during the year and time of day would do much to mitigate noise impacts.

Those projects that involve work in the riparian zone and in the lake could be expected to impact water quality and fish and aquatic resources through turbid runoff, siltation, and disruption of the substrate. Timing of construction activities and careful siting could partially mitigate some of these impacts at the following sites:

- Reconstruction of boat docks at Fairholm and Log Cabin
- Repair or replacement of existing dock at Lake Crescent Lodge

Conclusion. Many of the proposed projects would have short-term disturbance effects on wildlife during construction, while others would have a long-term or permanent effect due to loss of habitat. However, impacts associated with habitat loss are not expected to be significant due to the small acreages involved, the proximity to existing development (areas typically avoided by wildlife, particularly large mammals), and the availability of undisturbed habitat nearby. Timing of construction during the year and time of day would do much to mitigate noise impacts. Some actions, such as the proposed ban on PWC use, are likely to have a beneficial effect on wildlife by decreasing the potential for human disturbance.

Cumulative Effects. Proposed facility construction would result in the disturbance or loss of approximately 5 acres of habitat, 3-4 acres of which occurs on previously disturbed terrain. The irretrievable commitment of this acreage to development precludes its use as wildlife habitat.

CULTURAL RESOURCES

This alternative calls for the development of overall site plans and proposes specific actions for Fairholm, La Poel, Barnes Point, East Beach, Log Cabin, and the North Shore management areas. In areas that have not been previously surveyed, cultural resource inventory and evaluation for historic structures, cultural landscapes, archeological sites, and traditional cultural properties would be required, as would appropriate levels of consultation with the State Historic Preservation Office (see Appendix C). Survey, evaluation and consultation would be completed prior to taking any action. *The Secretary of the Interior's Standards for Rehabilitation* (NPS 1995b) would guide design work on historic buildings and structures.

Archeological Impacts

This alternative proposes a number of actions that could have an adverse effect on archeological sites (see Appendix C). To avoid or mitigate these impacts, survey, evaluation and consultation would be completed before any action is undertaken.

Historic Structure Impacts

- Moving the Barnes Point administrative functions out of the Storm King Ranger Station (Morgenroth Cabin) and replacing these functions with an all interpretation/orientation focus

would impact the historic elements of the cabin interior. The reorganization of the interior spaces would need to be sympathetic to the historic interior and would require compliance with Section 106 of the National Historic Preservation Act.

Cultural Landscape Impacts

North Shore

- Actions proposed for the North Shore management area would impact the Spruce Railroad which is potentially significant as a historic district or cultural landscape. The entire railroad within the park boundaries needs to be inventoried, including all of its associated structures and elements. Once the most important character-defining elements are identified, then the appropriateness of the proposed actions can be evaluated. An overall site plan would be developed to identify the areas where restrooms can be placed with minimal impact to the existing trail. Widening the trail beyond the original railbed width would be detrimental to the overall character and might be difficult to accomplish in some areas. Closing the tunnels off would be a loss and would require mitigation. Some or all of the proposed actions should be able to be accomplished in a sympathetic manner through careful planning and would require Section 106 compliance.

La Poel

- The overall site design at La Poel needs to be sensitive to the remains of resort and CCC development at this location. Survey and evaluation should occur prior to making any decisions regarding camping in the area.

Barnes Point

Barnes Point contains two historic districts, Lake Crescent Lodge and Rosemary Inn.

- The overall site plan at Barnes Point needs to take into consideration the two historic districts and their associated landscapes. The major issue outside the boundaries of the districts is keeping the overall feel of a quiet, peaceful and pedestrian place. A large volume of cars and parking areas would adversely affect the quiet atmosphere.
- The overall trail system at Barnes Point weaves in and out of the two historic districts. The approaches to and the trails throughout the districts need to be compatible with historic pedestrian paths. Developing an overall trail plan at Barnes Point would require Section 106 compliance.
- If after a feasibility study is completed and an expansion of the Lake Crescent Lodge is determined to be feasible and desirable, the overall building design and site layout would require careful consideration to not adversely impact the pedestrian quality of the district. Section 106 compliance would be required.

Visitor Services/Facilities

- Prior to establishing U.S. 101 as a parkway incorporating historic elements, research into the design and construction of the highway needs to be accomplished to establish the historic significance of the roadway, including the involvement of the CCC crews. New elements should be designed to be compatible with and not replicate any of the authentic historic elements. Section 106 compliance would be necessary at a minimum to concur that no historic property exists.

Water Recreation

- Noise associated with the use of motorboats has a negative impact on the peaceful atmosphere of both the Rosemary Inn and Lake Crescent Lodge Historic Districts.

Conclusion. In areas that have not been previously surveyed, cultural resource inventory and evaluation for historic structures, cultural landscapes, archeological sites, and traditional cultural properties would be required, as would appropriate levels of consultation with the State Historic Preservation Office. Survey, evaluation and consultation would be completed prior to taking any action. *The Secretary of the Interior's Standards for Rehabilitation* (NPS 1995b) would guide design work on historic buildings and structures.

Cumulative Effects. This alternative, if undertaken with the cultural resource evaluation and protection strategies identified, would result in no loss of historic structures, cultural landscapes, or historic districts within the Lake Crescent area. Archeological resources may be present in some project areas and could be affected. Impacts to archeological sites would be minimized through project redesign or excavation. As a result, there should be no loss of important archeological information.

PARK OPERATIONS/ADMINISTRATION

Proposed increases in visitor services and facilities would pose both added and decreased demands on park management. Additional maintenance, which includes routine cleaning and servicing, maintaining utility systems and performing needed repairs and painting of facilities would be required for:

- Accessible restroom at Bovee's Meadow
- Accessible toilets at East Beach, North Shore picnic area, and Spruce Railroad trailheads
- Additional parking at Log Cabin and East Beach
- Possible tent camping area at La Poel
- Spruce Railroad multi-purpose trail

However, the following actions would reduce maintenance needs at the following sites:

- Removal of underground fuel tank at Fairholm
- Removal of lakeshore campsites at Fairholm campground

Increased ranger services (e.g., law enforcement, patrol, first aid) would be required due to added patrol coverage or increased visitor use in response to new and mixed uses at:

- Possible tent camping area at La Poel
- Additional parking at East Beach
- Spruce Railroad multi-purpose trail

Conversely, providing visitor facilities at planned and convenient locations would tend to decrease the incidence of certain visitor activities occurring randomly around the lake. For instance, providing additional boat docks and ramps would reduce the number of informal sites where visitors now launch boats along with the inadvertent resource damage that typically accompanies such use. Widening East Beach, Piedmont, and Lyre River roads to accommodate bicycle lanes would reduce the potential for car/bicycle accidents along these roads. Increased demands for interpretive facilities and services in the Lake Crescent area could also be expected due to an anticipated increase in visitor use.

Conclusion. Proposed increases in visitor services and facilities would impose added demands on park management, including maintenance of additional facilities and an increased demand for services by Lake Crescent rangers. Such increases would be countered by a slight decrease in maintenance needs due to the removal of some facilities.

Cumulative Effects. Additional park staff would be needed in the Lake Crescent area to fully implement all of the actions proposed in this alternative. Without increases to the overall park staff and budget, additional staff would have to come from other areas of the park.

VISITOR USE/EXPERIENCE

Actions proposed in this alternative are intended to enhance protection of park resources as well as visitor use and enjoyment of the recreational opportunities at Lake Crescent, while recognizing the high scenic natural resource values that make the lake what it is. Enhancement of recreational opportunities would be achieved in several ways. Providing for specific recreational opportunities where they have not existed before or where such use has been informal or, perhaps, unsafe would occur with:

- Bicycle lanes along East Beach, Piedmont, and Lyre River roads
- Bicycle rental at Fairholm
- Spruce Railroad multi-purpose trail

Other projects would provide added convenience or opportunity for a higher volume of visitation without changing the scope of use at specific sites:

- Additional parking at Fairholm store, Log Cabin, East Beach, and Spruce Railroad trailheads
- Relocation of Fairholm store
- Installation of above-ground fuel tanks at Fairholm and Log Cabin
- Reconstruction of boat docks at Fairholm and Log Cabin
- Repair or replacement of existing dock at Lake Crescent Lodge
- Possible expansion of Lake Crescent Lodge

ENVIRONMENTAL CONSEQUENCES

- Accessible restroom at Bovee's Meadow
- Accessible toilets at East Beach, North Shore picnic area, and Spruce Railroad trailheads

The following proposed actions would serve the recreational needs of visitors better and provide enhanced protection for the natural environment by eliminating some facilities and visitor activities that sustain forms of visitor use incompatible with this intention. These actions would remove facilities from sensitive areas such as the lakeshore and yet be more thoughtfully planned and convenient for visitors:

- Reconfiguration of Fairholm campground
- Removal of underground fuel tank at Fairholm
- Removal of lakeshore campsites at Fairholm campground
- Relocation of Bovee's Meadow picnic area
- Obliteration/revegetation of social trails between Bovee's Meadow and Barnes Creek
- Elimination of overflow camping at La Poel
- Relocation of La Poel picnic sites away from creek
- Redesign and relocation of Log Cabin Resort buildings
- Replacement of some Log Cabin RV campsites with cabins

In the short term, most of the above projects would temporarily limit access to sites and opportunities during construction. In addition, there could be some noise and visual intrusion. However, over the long term there would be an increase in visitor services and recreational opportunities in the Lake Crescent area. This expanded range of services and opportunities would enhance the experience for some visitors while diminishing it for those seeking a quiet, peaceful setting. A prohibition on PWC use would improve visitor safety as well as minimize conflicts with other park users. Only a small percentage of lake users would be negatively affected by the ban on PWCs.

Conclusion. In the short term, park visitors would be inconvenienced due to temporary closures, noise and impaired visibility associated with construction activities. Over the long term, there would be more recreational opportunities available at more sites at Lake Crescent. Opportunities to enjoy natural features of the area, as compared to recreational features, would be enhanced under this alternative.

Cumulative Effects. Visitation to the Lake Crescent area would likely increase due to the added services and recreational opportunities available to visitors. This expanded range of services and opportunities would enhance the experience for some visitors while diminishing it for others. Those seeking a quiet, peaceful setting may choose to recreate elsewhere, including sites outside the park. Displaced PWC operators from Lake Crescent would likely be dispersed into other popular areas in the region, including Lake Sutherland, one mile to the east of Lake Crescent.

LOW-INCOME AND MINORITY POPULATIONS

Actions proposed in this alternative would have no known effects on low-income or minority populations.

UNAVOIDABLE ADVERSE IMPACTS, IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES, AND THE RELATIONSHIP BETWEEN SHORT-TERM USE OF THE ENVIRONMENT AND MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

Actions proposed in this alternative would not result in unavoidable adverse impacts on park resources or values. Proposed facility construction would result in the disturbance or loss of approximately 5 acres of vegetation, 3-4 acres of which occurs on previously impacted sites in the western hemlock zone.

Approximately one acre of presently undisturbed vegetation would be lost due to construction of the Spruce Railroad trail. No old-growth trees would be affected. The irretrievable commitment of this acreage to development precludes its use as wildlife habitat. To help compensate for lost habitat values, areas disturbed by construction would be revegetated and landscaped or restored to natural conditions. Although vegetation and habitat values would return with time, conditions on restored sites may be different than those that existed prior to construction.

Short-term impacts associated with construction and other proposed actions include air quality degradation, increased traffic, noise, viewshed impairment, wildlife avoidance, and a potential disruption of visitor services. These would be countered by long-term benefits of increased visitor services, enhanced NPS operations, and further protection of park resources.

Historical and archeological resources would be identified during the compliance survey process. Every effort would be made to avoid resources during the project development stage. If the resources cannot be avoided, mitigation would be undertaken as outlined in 36 CFR 800 in consultation with the Washington State Historic Preservation Office and the Advisory Council on Historic Preservation, Native American tribes and the local population as needed.

EFFECTS FROM ACTIONS PROPOSED IN ALTERNATIVE B: NO ACTION

NATURAL RESOURCES

Air Quality

Current management practices and visitor activities generate minor amounts of airborne pollutants largely due to vehicle and equipment emissions. However, such impacts are typically localized, temporary, and insignificant and do not exceed national ambient air quality standards or allowable Class I increments.

Conclusion. Under the no-action alternative, impacts on air quality and related values are expected to remain localized, temporary, and insignificant despite a potential increase in visitor use levels.

Wilderness

The use of motorized watercraft and vehicles and the presence of visitor facilities around the lake provide a visual and audible reminder of human influence on the landscape, though they do not have a direct impact on the surrounding Olympic Wilderness. Such intrusions may detract from the wilderness experience of some visitors.

Conclusion. Although existing management practices and visitor activities do not have a direct impact on the Olympic Wilderness, indirect impacts such as noise and viewshed impairment in the Lake Crescent area may detract from the wilderness experience of some visitors.

Water Resources

Water quality would continue to be impaired along the shoreline at some of the more intensely used sites around the lake including Fairholm campground, Bovee's Meadow, La Poel, East Beach, and Log Cabin due to soil erosion and vegetation losses resulting from recreational use, in addition to natural processes such as wave action and seasonal rise in water levels. Fuel associated with the use of motorized watercraft offers another potential source of water pollution. Water quality in stream channels may also be impacted by increased siltation caused by visitor-induced erosion of stream banks or surface water runoff from parking areas. Nonetheless, increases in turbidity and sedimentation are not expected to have a long-term negative effect on water quality due to the short-term nature of the impact.

Existing management practices would not cause permanent changes to floodplains, nor have an adverse effect on wetland functions or values.

Conclusion. Turbidity and sedimentation resulting from both natural processes and visitor use have the potential to degrade the water quality of Lake Crescent. However, effects are not expected to have a long-term negative consequence on water quality within the watershed due to the localized and short-term nature of the impact.

Geology and Soils

Continuation of existing management practices and visitor activities would result in little new ground disturbance within the watershed. However, in areas where visitor use is concentrated, such as at Fairholm, Bovee's Meadow, La Poel, East Beach, and Log Cabin, resource damage is apparent. Some of the more prevalent impacts associated with visitor use include vegetation trampling and removal, barren ground, altered drainage patterns, and soil compaction and erosion. Without corrective action, such problems are expected to persist.

Soil compaction restricts the ability of surface water to infiltrate into the ground, which may exacerbate erosion problems. This is a particular concern where runoff from parking areas is allowed to disperse as sheet flows. In such instances, compacted soils reduce the ability for a natural filtering process to occur. Compacted soils also reduce the movement of oxygen through the soil for plant uptake, and result in the loss or declining health of vegetation. Fairholm campground in particular suffers from soil compaction as a result of heavy use, along with other areas around the lake where social trails have proliferated and inadequate parking has forced visitors to park on road shoulders.

Current park management practices include taking actions to correct perceived problems with soil compaction and lakeshore erosion by revegetating disturbed sites and eliminating social trails when possible. Such practices would continue under the no-action alternative.

Conclusion. Although existing management practices and visitor activities would result in little new ground disturbance, resource damage including vegetation trampling and removal, barren ground, altered drainage patterns, and soil compaction and erosion would persist in areas of concentrated visitor use. Management actions to correct such problems would continue.

Vegetation

Vegetation trampling and disturbance would persist in high visitor use areas due to a proliferation of social trails and a lack of well-defined pathways to channel pedestrian traffic.

Retention of the following visitor facilities in their present locations could have continuing or increasing effects on several species of rare plants in nearshore habitats of Lake Crescent:

- Shoreline campsites at Fairholm campground
- Picnic area at Bovee's Meadow
- Parking at East Beach

Of the project sites listed above, detailed underwater surveys for rare plants have been conducted only at Bovee's Meadow. Here, three rare plants (western quillwort, water lobelia, Illinois pondweed) occur which could be put at risk by continued use of the shoreline for picnicking and associated activities. Before any actions occur at the other sites, thorough surveys would be conducted and appropriate actions taken to protect these and any other rare plants.

ENVIRONMENTAL CONSEQUENCES

Management actions would continue to be taken to eliminate nonnative plant species and revegetate disturbed sites with native vegetation.

Conclusion. Vegetation trampling and disturbance would continue to occur in high visitor use areas due to poor site design, including a lack of well-defined pathways. Retention of some visitor facilities in their present locations could have continuing or increasing effects on several species of rare plants in nearshore habitats of Lake Crescent. Management efforts such as eliminating nonnative plants and revegetating disturbed sites with native vegetation would continue.

Wildlife

A continuation of existing management practices would not result in adverse impacts on wildlife, including sensitive species, or significantly affect animal behavior or habitat use in the Lake Crescent watershed. Despite a potential increase in human-wildlife interactions resulting from an anticipated increase in visitor use of the area, this increase is not expected to be significant. Areas of concentrated human activity, conditions typical of development, would continue to be avoided, particularly by large mammals. No additional habitat would be lost to development, nor would existing management practices result in a significant increase in fishing pressure or adversely affect fish habitat. The proposed ban on PWC use is likely to have a beneficial effect on wildlife by decreasing the potential for human disturbance.

Conclusion. A continuation of existing management practices would not result in significant impacts on wildlife and would not significantly affect animal behavior or habitat use in the Lake Crescent watershed. The proposed ban on PWC use is likely to have a beneficial effect on wildlife by decreasing the potential for human disturbance.

CULTURAL RESOURCES

Cultural Landscape Impacts

Noise associated with the use of motorboats has a negative impact on the peaceful atmosphere of both the Rosemary Inn and Lake Crescent Lodge Historic Districts.

PARK OPERATIONS/ADMINISTRATION

Current interpretive, resource management and law enforcement functions would be maintained. With the retention of several administrative functions at Storm King Ranger Station, crowded working conditions at that facility would continue.

VISITOR USE/EXPERIENCE

A diversity of recreational and visitor-use opportunities would continue to be provided in the Lake Crescent area, although a general reduction in the quality of the experience could occur as more people use

the lake for a variety of recreational activities. Furthermore, with no well-defined center for interpretation/orientation at Barnes Point, the potential for enhancing the quality of the visitor experience would not be fully realized.

The demand for additional boating facilities (e.g., docks, fueling stations, trailer parking) around the lake would continue to exceed the present supply during high-use periods. Poorly configured parking areas at the Fairholm store, Bovee's Meadow and East Beach would continue to contribute to traffic congestion at these sites, decreasing safety for pedestrians and motorists and detracting from the quality of the visitor experience. Additionally, beach access for disabled visitors would remain difficult at each management area.

Continued use of motorized watercraft on Lake Crescent would result in increased ambient noise levels and visual impacts, and may detract from the quality of the experience for some visitors, while enhancing the experience for others. A prohibition on PWC use would improve the experience for the majority of visitors to Lake Crescent, particularly those seeking a quiet, peaceful setting. It would enhance visitor safety as well as minimize conflicts with other park users. Only a small percentage of lake users would be negatively affected by the ban on PWCs.

Conclusion. A diversity of recreational and visitor-use opportunities would continue to be provided in the Lake Crescent area, although a general reduction in the quality of the experience could occur as more people use the lake for a variety of recreational activities and conflicts among user groups increase. Without corrective actions, visitor use would continue to cause resource impacts, creating a less natural landscape and detracting from the quality of the visitor experience. The most significant effect would be the alteration of the existing character of the lake.

LOW-INCOME AND MINORITY POPULATIONS

The continuation of existing management practices would have no known effect on low-income or minority populations.

EFFECTS FROM ACTIONS PROPOSED IN ALTERNATIVE C

NATURAL RESOURCES

Air Quality

Impacts on air quality would be similar to those described under Alternative A due to the comparable levels of development. Construction activities could be expected to cause an increase in airborne pollutants over existing levels; however, these increases would be localized, short term, and insignificant in relation to the park's overall air quality.

There would be short-term air quality degradation in the Lake Crescent watershed caused by exhaust emissions from the gasoline and diesel engines of heavy equipment used to construct:

- Additional parking at Fairholm store, Log Cabin, East Beach, and Spruce Railroad trailheads
- Improvements at Fairholm store
- Reconfiguration of Fairholm campground
- Construction of boat dock and ramp at La Poel; reconstruct boat dock at Fairholm
- Construction of second small boat dock at Barnes Point; reconstruct dock at Log Cabin
- Installation of above-ground fuel tanks at Fairholm and Log Cabin
- Lake Crescent Lodge expansion and multi-use facility
- Accessible restroom at Bovee's Meadow
- Accessible toilets at East Beach, North Shore picnic area, and Spruce Railroad trailheads
- Spruce Railroad multi-purpose trail
- Bicycle lanes along East Beach, Piedmont, and Lyre River roads

Construction activities would likely release moderate amounts of dust into the air. Widening of the Spruce Railroad trail to accommodate multiple trail uses could have a more noticeable effect on air quality due to the rock cuts and excavation needed to widen portions of the trail at both tunnel locations. Although air quality would be impaired in the immediate vicinity of construction sites, these impacts would be temporary; conditions existing prior to construction could be expected to return once projects are completed.

Providing campsites along the Spruce Railroad trail would produce a slight increase in the amount and distribution of wood smoke from campfires during the summer months.

Conclusion. Since pollution sources would be temporary, localized, and of small magnitude, there would be no adverse effect on air quality or related values in the Lake Crescent watershed. Overall, it is expected that diminished air quality would have no effect on human health and would result only in minor and temporary impairment of visibility.

Wilderness

Impacts on wilderness would be the same as those described for Alternative A. None of the actions proposed in this alternative would have a direct impact on the surrounding Olympic Wilderness. However, the use of motorized watercraft and vehicles, and the presence of visitor facilities around the lake, would

continue to provide a visual and audible reminder of human influence on the landscape. Although human intrusions would not be significantly increased over existing conditions, they may still detract from the wilderness experience of some visitors.

Conclusion. Although none of the proposed actions would have a direct impact on the Olympic Wilderness, indirect impacts such as noise and viewshed impairment in the Lake Crescent area may detract from the wilderness experience of some visitors.

Water Resources

Most concerns regarding impacts on water quality relate to the construction phase of projects. Water quality can be protected to a large extent by avoiding construction during the heavy rain season and through the use of proper construction techniques and procedures to keep silt out of stream drainages and the lake. Runoff from parking areas can be mitigated by good design.

There is a possibility that runoff from construction sites for the following projects could cause short-term siltation of the lake:

- Additional parking at Fairholm store, Log Cabin, East Beach, and Spruce Railroad trailheads
- Lake Crescent Lodge expansion and multi-use facility
- Bicycle lanes along East Beach, Piedmont, and Lyre River roads

The following project, which involves asphalt paving, could have direct and indirect effects on water quality in the Lake Crescent watershed:

- Reconfiguration of Fairholm campground

Precipitation runoff mixed with pollutants from asphalt pavement could reach the lake via surface and groundwater flows, though with good design, this effect can be mitigated to a large extent by construction of catchment basins to separate oil from water. Pavement also prevents normal percolation of water into the ground, thus increasing surface flow. Because grades in the area are uniformly steep and few options exist for road realignment, approximately 0.1 acre of undisturbed habitat would be affected; however, any additional paving would contribute cumulatively to the concern for alteration of natural hydrology.

Construction of the following boating facilities would also have short- and long-term effects on water quality:

- Construction of boat dock and ramp at La Poel; reconstruct boat dock at Fairholm
- Construction of second small boat dock at Barnes Point; reconstruct dock at Log Cabin

During construction, there would be short-term siltation and disturbance of lake bottom sediments at the above project sites. Over the long term, boat fueling and the potential for fuel spills would likely increase since improved boating facilities (e.g., new boat ramps, docks, additional parking for boat trailers) could encourage an increase in the overall amount of boating on the lake.

ENVIRONMENTAL CONSEQUENCES

None of the proposed actions would result in permanent changes to floodplains or have an adverse effect on wetland functions or values.

Conclusion. Increased levels of pollutants from parking lot runoff, siltation during construction, and fuel spills and emissions from increased levels of boating could potentially decrease the overall water quality of the lake. However, mitigation measures would be employed to ensure that water quality and other habitat values are not adversely affected.

Geology and Soils

Several proposed construction projects would have long-term effects on soils, though in every case, development would occur in areas of prior disturbance (the type of previous disturbance is indicated in parentheses):

- Additional parking at Fairholm store (developed site)
- Improvements at Fairholm store (developed site with previous disturbance)
- Reconfiguration of Fairholm campground (developed area)
- Installation of above-ground fuel tanks at Fairholm and Log Cabin (previous disturbance)
- Lake Crescent Lodge expansion and multi-use facility (developed site with previous disturbance)
- Accessible restroom at Bovee's Meadow (previous disturbance)
- Accessible toilets at East Beach, North Shore picnic area, and Spruce Railroad trailheads (previous disturbance)
- Additional parking at Log Cabin (previous development)
- East Beach parking, short-term improvements (reconfiguration of existing parking area)
- East Beach parking, long-term improvements (previous logging activity)
- Parking at east and west trailheads of Spruce Railroad trail (previous disturbance)

Although the above projects represent a permanent alteration to the existing soil structure on these sites, there would be no cumulative change in the total undisturbed acreage committed to development. The combined area of impact for all the above projects is approximately 3-4 acres of previously disturbed ground.

Widening of the Spruce Railroad trail to accommodate multiple trail uses would have a pronounced effect on geologic and soil resources. Parts of the original railroad were cut into steep rock cliffs, with two tunnels dug where required by terrain. These tunnels have been closed and it is infeasible to reopen them for trail use. Widening the present trail for horses, bicycles, wheelchairs and pedestrians would require cutting into undisturbed rock and soils at the two tunnel locations, creating potentially extensive cut slopes that would leave a noticeable scar.

Widening and excavation would not be required where the trail is located on the 12-foot wide railroad grade. Where the trail must leave the railroad grade, widening would be necessary, and require excavation in some instances, such as the approximate 400 linear feet of trail cut into the slope above the railroad grade approximately 0.5-mile west of the eastern trailhead. Excavation would also be required in constructing short access trails above the North Shore Road at the North Shore picnic area and at Fairholm,

but the cut slopes in these areas would not be severe, as the soils are much more stable than the loose material at the entrances to the tunnels. The total area of new trail surface would be about one acre, most of which is located on the former railroad right-of-way. Up to an additional acre of presently undisturbed soils would be affected by construction of backcountry campsites along the Spruce Railroad trail.

Elements of this alternative would cause additional and continued erosion and compaction of soils along the shoreline of the lake. The following projects, however, would be located on already developed and highly altered segments of the lakeshore:

- Construction of boat dock and ramp at La Poel; reconstruct boat dock at Fairholm
- Construction of second small boat dock at Barnes Point; reconstruct dock at Log Cabin
- Establish buoyed swimming area at Bovee's Meadow

Soil compaction restricts the ability for surface water to infiltrate into the ground, which may exacerbate erosion problems. Compacted soils also reduce the movement of oxygen through the soil for plant uptake and result in the loss or declining health of vegetation. Although soil erosion and compaction would continue in those areas heavily used by visitors including Fairholm, Bovee's Meadow, La Poel, East Beach and Log Cabin, additional site planning would do much to alleviate these impacts. For example, the proposal to obliterate and revegetate social trails between Bovee's Meadow and Barnes Creek would help decrease soil compaction and erosion that presently occurs in this area. Construction of any new trails would further reduce the potential for soil impacts by channeling visitor use along properly designed and maintained trails.

There are no known active seismic faults or other geologic hazards affecting the proposals in this alternative.

Conclusion. Almost all lands proposed for construction possess soils that have undergone prior disturbance or alteration. Approximately 3-4 acres of previously disturbed soils would be impacted by construction of new facilities. Widening of the Spruce Railroad trail to accommodate multiple trail uses could have a more pronounced effect on undisturbed soils due to the potentially extensive cut slopes that would be created at the two tunnel locations. The total area of new trail surface would be about one acre, most of which is located on the former railroad right-of-way. Up to an additional acre of presently undisturbed soils would be affected by construction of backcountry campsites along the trail. Although soil compaction and erosion would continue in areas heavily used by visitors, some of the proposed actions would help mitigate these impacts.

Vegetation

Nearly every project listed in this alternative would affect vegetation in one of several ways. Some would cause removal of pristine vegetation to accommodate the project; others would affect vegetation in already developed sites where disturbance is maintained; one project would restore already damaged vegetation; and another project would remove vegetation with the intention of changing the scope of visitor use. Many projects are on sites that, though altered and developed in the past, have vegetation that has been recovering and now presents a somewhat natural appearance. Finally, lakeshore and aquatic vegetation, including some rare species, would be affected by some of the proposed projects.

ENVIRONMENTAL CONSEQUENCES

Developing backcountry campsites along the Spruce Railroad trail would remove vegetation from an area that is clearly an undisturbed site. Although this project requires removal of large amounts of vegetation, the impacted area is likely to be less than one acre and sites would be designed to avoid and protect any sensitive species. The cumulative effect, however, would be the loss of another increment of pristine landscape.

By developing backcountry campsites along the Spruce Railroad trail and shifting at least some use from day to overnight, there would be indirect effects on vegetation. Informal social trails would develop to water, wood, and scenic resources. Campers foraging for firewood would tend to scour the area not only of dead and down woody materials but also of live and dead limbs from nearby trees. Vegetation would likely be trampled at the sites, leaving bare ground.

The following projects would take place on already disturbed sites where vegetation has been substantially altered and where the changes have been maintained:

- Bicycle lanes along East Beach, Piedmont, and Lyre River roads
- Lake Crescent Lodge expansion and multi-use facility
- Potential expansion of boat trailer parking at Barnes Point
- Accessible restroom at Bovee's Meadow
- Accessible toilets at East Beach, North Shore picnic area, and Spruce Railroad trailheads
- East Beach parking, short-term improvements (reconfiguration of existing parking area)

At the above sites, maintenance practices and visitor uses have prevented native vegetation from becoming reestablished. Road shoulders are mowed, vistas are maintained, trampling occurs, and vegetation is manipulated to control exotic species. The effects of new projects at these locations would have very little noticeable impact on current conditions.

At the site of many of the proposed projects listed below, native vegetation has begun to reestablish itself, either through active vegetation management (e.g., planting native species, eliminating exotics) or by natural processes:

- Relocation of Fairholm store
- Reconfiguration of Fairholm campground
- Establishment of tent camping area at La Poel
- Improvement of beach access at La Poel
- Additional parking at Log Cabin
- East Beach parking, long-term improvements (construction of upper parking lot)
- Spruce Railroad multi-purpose trail

Construction at the above sites would have a substantial effect on recovering vegetation, both scenically and ecologically. Visual scars from previous construction or use would be reopened. Ecological processes of succession would be interrupted and set back. As part of every construction project, the unavoidable removal of vegetation could be somewhat mitigated by landscaping and replanting with native vegetation.

Vegetation at La Poel, primarily alder trees, which grow thickly along the shoreline of the lake and creek, would be selectively removed to enhance visitor access to these sites. Shoreline vegetation may have been

altered during construction and past use of the area, but in recent years has taken on an entirely natural appearance and function. The effect at La Poel would be to convert a section of natural lakeshore to recreational development. This means that more of the Lake Crescent shoreline would be manipulated to accommodate visitors and recreational pursuits.

One project, which involves the elimination and revegetation of social trails between Bovee's Meadow and Barnes Creek, recognizes an ongoing problem with informal shoreline trails and the harmful effects on shoreline plants. Eradication of social trails and construction of new trails would further reduce the potential for vegetation impacts by channeling visitor use along properly designed and maintained trails and revegetating disturbed sites with native species.

The following construction and recreational uses could affect several species of rare plants in nearshore aquatic habitats of Lake Crescent:

- Construction of boat dock and ramp at La Poel; reconstruct boat dock at Fairholm
- Construction of second small boat dock at Barnes Point; reconstruct dock at Log Cabin
- Establish buoyed swimming area at Bovee's Meadow

Of the project sites listed above, detailed underwater surveys for rare plants have been conducted only at Bovee's Meadow. Here, three rare plants (western quillwort, water lobelia, Illinois pondweed) occur which could be put at risk by creating facilities to encourage swimming. Before any actions occur at the other sites, thorough surveys would be conducted and appropriate actions taken to protect these and any other rare plants.

Conclusion. Actions proposed in this alternative would have substantial effects on the vegetation at Lake Crescent and would continue to expand the trend away from natural vegetative processes. More acreage of undisturbed and formerly disturbed vegetation would be permanently converted to recreational development. Rare aquatic plant species would be put at greater risk from construction and recreational use. Some landscapes would cease to be the product of natural processes and would be maintained as manipulated sites. Construction of new facilities would disturb or eliminate vegetation from 3-4 acres of previously altered terrain. An additional two acres of presently undisturbed vegetation would be lost due to construction of the Spruce Railroad trail and associated backcountry campsites. To help mitigate vegetation impacts, disturbed areas would be revegetated with native species and restored to natural conditions wherever possible.

Wildlife

Effects on known wildlife populations in the Lake Crescent area would be primarily due to disturbance and removal of portions of habitat due to construction activities. The following proposed projects would likely cause disturbance to wildlife from noise and human presence during actual construction:

- Bicycle lanes on East Beach, Piedmont, and Lyre River roads
- Additional parking at Fairholm store, Log Cabin, East Beach, and Spruce Railroad trailheads
- Improvements at Fairholm store
- Reconfiguration of Fairholm campground

ENVIRONMENTAL CONSEQUENCES

- Construction of boat dock and ramp at La Poel; reconstruct boat dock at Fairholm
- Construction of second small boat dock at Barnes Point; reconstruct dock at Log Cabin
- Installation of above-ground fuel tanks at Fairholm and Log Cabin
- Lake Crescent Lodge expansion and multi-use facility
- Accessible restroom at Bovee's Meadow
- Accessible toilets at East Beach, North Shore picnic area, and Spruce Railroad trailheads
- Establishment of tent camping area at La Poel
- Improvement of beach access at La Poel
- Spruce Railroad multi-purpose trail

Possible effects of construction noise and other activity on wildlife would depend on such variables as the location, nearness of the construction site, time of year and species affected. Most animals would be expected to avoid these areas during construction and may abandon nests or dens if construction occurred during critical phases in their breeding cycles. In some instances, permanent displacement of individuals could occur due to the loss of nesting or denning sites, roost sites, protective cover, or a decline of food sources. For the most part, however, construction impacts would be short term and minor. Timing of construction during the year and time of day would do much to mitigate noise impacts.

The proposed ban on PWC use is likely to have a beneficial effect on wildlife by decreasing the potential for human disturbance.

Those projects that involve work in the riparian zone and in the lake could be expected to impact water quality and fish and aquatic resources through turbid runoff, siltation, and disruption of the substrate. Any projects that remove lakeshore vegetation or convert shallow, low-gradient beaches to steep, hardened banks would disrupt fish spawning and rearing habitat. Timing of construction activities and careful siting could partially mitigate some of the impacts at the following sites:

- Improvement of beach access at La Poel
- Construction of boat dock and ramp at La Poel; reconstruct boat dock at Fairholm
- Construction of second small boat dock at Barnes Point; reconstruct dock at Log Cabin

Clearing of lakeside vegetation at La Poel would remove critical shade and a source of woody debris along the lakeshore. Both are important in the formation of habitat for juvenile trout. Due to lakeside development elsewhere around the lake, such habitat is in short supply and any addition to the cumulative loss must be regarded as serious.

Prior to undertaking any proposed action, an assessment of its effects on endangered, threatened, proposed, and candidate animal species would be conducted, with consultation with the U.S. Fish and Wildlife Service as necessary. Protection of these species would receive highest consideration in project planning.

Conclusion. Many of the projects proposed in this alternative would have short-term disturbance effects on wildlife during construction, while others would have a long-term or permanent effect due to loss of habitat. Although the effects of most projects are not anticipated to be significant, any loss of habitat for juvenile trout must be regarded as serious. A ban on PWC use is likely to have a beneficial effect on wildlife by decreasing the potential for human disturbance.

CULTURAL RESOURCES

This alternative calls for the development of overall site plans and proposes specific actions for Fairholm, La Poel, Barnes Point, East Beach, Log Cabin, and the North Shore management areas. In areas that have not been previously surveyed, cultural resource inventory and evaluation for historic structures, cultural landscapes, archeological sites, and traditional cultural properties would be required, as would appropriate levels of consultation with the State Historic Preservation Office (see Appendix C). Survey, evaluation and consultation would be completed prior to undertaking any action. *The Secretary of the Interior's Standards for Rehabilitation* (NPS 1995b) would guide design work on historic buildings and structures.

Archeological Impacts

This alternative proposes a number of actions that could have an adverse effect on archeological sites (see Appendix C). To avoid or mitigate these impacts, survey, evaluation and consultation would be completed before any action is undertaken.

Historic Structure Impacts

- Moving the Barnes Point administrative functions out of the Storm King Ranger Station (Morgenroth Cabin) and replacing these functions with an all interpretation/orientation focus would impact the historic elements of the cabin interior. The reorganization of the interior spaces would need to be sympathetic to the historic interior and would require compliance with Section 106 of the National Historic Preservation Act.

Cultural Landscape Impacts

North Shore

- Actions proposed for the North Shore management area would impact the Spruce Railroad which is potentially significant as a historic district or cultural landscape. The entire railroad within the park boundaries needs to be inventoried, including all of its associated structures and elements. Once the most important character-defining elements are identified, then the appropriateness of the proposed actions can be evaluated. An overall site plan should be developed that would identify the areas where restrooms can be placed with minimal impact to the existing trail. Widening the trail beyond the original railbed width would be detrimental to the overall character and might be difficult to accomplish in some areas. Closing the tunnels off would be a loss and would require mitigation. Some or all of the proposed actions should be able to be accomplished in a sympathetic manner through careful planning and would require Section 106 compliance.

La Poel

- The overall site design at La Poel needs to be sensitive to the remains of resort and CCC development at this location. Survey and evaluation should occur prior to making any decisions regarding camping in the area.

Barnes Point

Barnes Point contains two historic districts: Lake Crescent Lodge and Rosemary Inn.

- The overall site plan at Barnes Point needs to take into consideration the two historic districts and their associated landscapes. The major issue outside the boundaries of the districts is keeping the overall feel of a quiet, peaceful and pedestrian place. A large volume of cars and parking areas would adversely affect the quiet atmosphere.
- The overall trail system at Barnes Point weaves in and out of the two historic districts. The approaches to and the trails throughout the districts need to be compatible with historic pedestrian paths. Developing an overall trail plan at Barnes Point would require Section 106 compliance.
- The concession option to increase the number of Lake Crescent lodging units by 10% would require a study of the impacts of the additional people and vehicles in the lodge area. The overall building design and site layout would require careful consideration to not adversely impact the pedestrian quality of the district. Section 106 compliance would be required.
- The construction of a "multi-use" facility at Lake Crescent Lodge would require careful planning so as not to adversely impact the historic character of the lodge setting. Consideration should be given to combining the new lodging units and the "multi-use" facility within the same building and outside of the limits of the historic districts. If it were located outside of the boundaries of the district, the primary concerns would be the visual impact on the district and the impact of additional people and vehicles in the area. This action would require Section 106 compliance.
- *Although an analysis of parking needs and expansion opportunities near the Storm King Ranger Station (Morgenroth Cabin) would occur outside of any historic districts, the effects of additional people and vehicles in the vicinity would need to be considered. If the parking area grows substantially, there would be an effect on cultural resources and Section 106 compliance would be necessary.*

Visitor Services/Facilities

- Prior to establishing U.S. 101 as a parkway incorporating historic elements, research into the design and construction of the highway needs to be accomplished to establish the historic significance of the roadway, including the involvement of the CCC crews. New elements should be designed to be compatible with and not replicate any of the authentic historic elements. Section 106 compliance would be necessary at a minimum to concur that no historic property exists.

Water Recreation

- Noise associated with the use of motorboats has a negative impact on the peaceful atmosphere of both the Rosemary Inn and Lake Crescent Lodge Historic Districts.

Conclusion. In areas that have not been previously surveyed, cultural resource inventory and evaluation for historic structures, cultural landscapes, archeological sites, and traditional cultural properties would be required, as would appropriate levels of consultation with the State Historic Preservation Office. Survey, evaluation and consultation would be completed prior to taking any action. *The Secretary of the Interior's Standards for Rehabilitation* (NPS 1995b) would guide design work on historic buildings and structures.

PARK OPERATIONS/ADMINISTRATION

The additional services and facilities being offered in this alternative would impose added demands on the National Park Service. Additional maintenance would be required for the following new construction:

- Picnic area at Fairholm
- Lake Crescent Lodge multi-use facility
- Second small boat dock at Barnes Point
- Accessible restroom at Bovee's Meadow
- Accessible toilets at East Beach, North Shore picnic area, and Spruce Railroad trailheads
- Tent camping area at La Poel
- New boat dock and ramp at La Poel
- Spruce Railroad multi-purpose trail and backcountry campsites

Maintenance at the above facilities would include such activities as routine cleaning and servicing, maintaining utility systems and performing needed repairs and painting.

Increased ranger services for law enforcement, patrol, first aid, and fire protection would be required in response to new and mixed uses for the following actions:

- Buoyed swimming area at Bovee's Meadow
- Tent camping area at La Poel
- Additional parking at East Beach
- Spruce Railroad multi-purpose trail and backcountry campsites

Conversely, providing visitor facilities at planned and convenient locations would tend to decrease the incidence of certain visitor activities occurring randomly around the lake. For instance, providing additional boat docks and ramps would reduce the number of informal sites where visitors now launch boats along with the inadvertent resource damage that typically accompanies such use. Widening roads to accommodate bicycle lanes would reduce the potential for car/bicycle accidents. Increased demands for interpretive facilities and services in the Lake Crescent area could also be expected due to an anticipated increase in visitor use.

Conclusion. Proposed actions would create additional facilities for the National Park Service to protect and maintain. To deal with the potential increase in visitors attracted to these new facilities, it would be necessary for the park to increase its staffing. Without increases to the overall park staff and budget, additional staff would have to come from other areas of the park.

VISITOR USE/EXPERIENCE

Virtually every action or project that is proposed in this alternative is intended, in the long-range, to enhance the recreational experience of visitors at Lake Crescent, whether boating, camping, hiking, bicycling, swimming, or picnicking. This enhancement would be achieved in several ways. Providing for specific recreational opportunities where they have not existed before or where such use has been informal or, perhaps, unsafe would occur with:

- Bicycle lanes on East Beach, Piedmont, and Lyre River roads
- Bicycle rental at Fairholm
- Picnic area at Fairholm
- Lake Crescent Lodge multi-use facility
- Buoyed swimming area at Bovee's Meadow
- Tent camping area at La Poel
- Spruce Railroad multi-purpose trail
- Backcountry campsites along the Spruce Railroad trail

Other projects would provide added convenience or opportunity for a higher volume of visitation without changing the scope of use at specific sites:

- Additional parking at Fairholm store, Log Cabin, East Beach, and Spruce Railroad trailheads
- Improvements at Fairholm store
- Construction of boat dock and ramp at La Poel; reconstruct boat dock at Fairholm
- Construction of second small boat dock at Barnes Point; reconstruct dock at Log Cabin
- Installation of above-ground fuel tanks at Fairholm and Log Cabin
- Expansion of Lake Crescent Lodge
- Accessible restroom at Bovee's Meadow
- Accessible toilets at East Beach, North Shore picnic area, and Spruce Railroad trailheads
- Potential expansion of boat trailer parking at Barnes Point

Two projects are proposed to improve the quality of the visitor experience in a natural setting:

- Reconfiguration of Fairholm campground
- Obliteration/revegetation of social trails between Bovee's Meadow and Barnes Creek

Developing backcountry campsites along the Spruce Railroad trail would detract from this natural setting by developing previously undisturbed sites.

In the short term, most of the above projects would temporarily limit access to sites and opportunities during construction. In addition, there could be some noise and visual intrusion. However, over the long

term there would be an increase in visitor services and recreational opportunities in the Lake Crescent area. This expanded range of services and opportunities would enhance the experience for some visitors while diminishing it for those seeking a quiet, peaceful setting. A prohibition on PWC use would improve visitor safety as well as minimize conflicts with other park users. Only a small percentage of lake users would be negatively affected by the ban on PWCs.

Conclusion. Actions proposed in this alternative would result in a short-term inconvenience for park visitors due to temporary closures, noise and impaired visibility. Over the long term, there would be more recreational opportunities available at more sites in the Lake Crescent area. Recreational experiences that depend on unspoiled natural conditions, solitude, and low volumes of visitor use would not be enhanced, and would most likely be diminished under this alternative.

LOW-INCOME AND MINORITY POPULATIONS

Actions proposed in this alternative would have no known effects on low-income or minority populations.

EFFECTS FROM ACTIONS PROPOSED IN ALTERNATIVE D

NATURAL RESOURCES

Air Quality

Although Alternative D would involve the least amount of new construction among alternatives, several proposed projects would require heavy equipment to remove existing facilities. Exhaust emissions from the gasoline and diesel engines of construction equipment used on the following projects would have short-term, localized impacts on air quality in the Lake Crescent watershed:

- Removal of Fairholm store
- Removal of boat docks and ramps at Fairholm and Log Cabin
- Removal of underground fuel tank at Fairholm
- Closure and revegetation of East Beach

The above actions would likely release moderate amounts of dust into the air. Closure and revegetation of the RV camping area at Log Cabin, removal of the existing campsites at La Poel, and reconfiguration of the Fairholm campground would also have similar short-term negative effects on air quality.

The proposed project at Log Cabin which would remove the A-frame units and locate replacement units away from the shoreline would result in similar emissions from analogous sources. However, because the project would be of longer duration and larger in scope, there would be more emissions released into the air and for a longer period of time.

Conclusion. Even if all of the above projects were to occur simultaneously, which would be extremely unlikely, the combined effect of equipment emissions on air quality in the Lake Crescent watershed would be barely noticeable, given that emissions from commercial trucks on U.S. 101 are not an apparent problem. Overall, it is expected that diminished air quality would have no effect on human health and would result only in minor and temporary impairment of visibility.

Wilderness

Removal of visitor services and facilities at various locations around the lake would decrease visual and audible intrusions on the surrounding Olympic Wilderness. Although none of the actions proposed in this alternative would have a direct impact on designated wilderness, the use of motorized watercraft and vehicles, and the presence of visitor facilities around the lake, would continue to provide a visual and audible reminder of human influence on the landscape. Although such intrusions would be noticeably decreased under this alternative, those remaining may still detract from the wilderness experience of some visitors.

Conclusion. Despite the removal of visitor services and facilities from around the lake, which would result in a noticeable decrease in human intrusions, indirect impacts such as noise and viewshed impairment in the Lake Crescent area may still detract from the wilderness experience of some visitors.

Water Resources

Several features or projects have been proposed specifically to alleviate a perceived water quality impact resulting from siltation and disturbance of lake bottom sediments at a facility or as a result of a particular activity:

- Removal of swimming areas at Fairholm and Bovee's Meadow
- Removal of lakeshore campsites at Fairholm
- Obliteration/revegetation of social trails between Bovee's Meadow and Barnes Creek
- Closure of beach at Bovee's Meadow
- Relocation of La Poel picnic sites away from creek
- Closure and revegetation of East Beach

Other proposed projects are intended to alleviate a recreational conflict, to alter the scope of activities at a site or reduce the amount of visitor use in an area. Implementing these projects would have an indirect, beneficial effect of removing an existing or potential source of water pollution that could result in siltation, disturbance of lake bottom sediments, or oil and gas spills:

- Removal of boat docks and ramps at Fairholm and Log Cabin
- Removal of underground fuel tank at Fairholm
- Reconfiguration of Fairholm campground and removal of lakeshore campsites
- Removal of existing campsites at La Poel
- Redesign and relocation of Log Cabin Resort buildings
- Closure and revegetation of RV camping area at Log Cabin
- Closure and revegetation of East Beach

Removal, relocation or reconfiguration of the following facilities could cause short-term degradation of water quality due to runoff of sediments into the lake. However, such impacts would be mitigated through careful project planning and the use of sediment traps and other devices:

- Removal of Fairholm store
- Reconfiguration of Fairholm campground
- Removal of boat docks and ramps at Fairholm and Log Cabin
- Removal of underground fuel tank at Fairholm
- Closure of beach at Bovee's Meadow
- Removal of existing campsites at La Poel
- Redesign and relocation of Log Cabin Resort buildings
- Closure and revegetation of RV camping area at Log Cabin
- Closure and revegetation of East Beach

None of the proposed actions would result in permanent changes to floodplains or have an adverse effect on wetland functions or values.

Conclusion. Overall, actions proposed in this alternative would alleviate some existing sources of pollution, would prevent future sources, and would have only minor and short-term negative effects on the water quality of Lake Crescent.

Geology and Soils

The intent of this alternative is to remove many existing visitor facilities and restore these sites to a more natural condition and appearance. In several, if not all, of the projects listed below, following removal, relocation or reconfiguration of facilities, moderate amounts of fill and recontouring of the landscape could be necessary. Additional topsoil may be required to allow for replanting of native vegetation. In the event that topsoil stockpiles from proposed projects are insufficient to cover disturbed areas, sterilized topsoil would be obtained from commercial sources. The total area involved in the following projects is likely to be less than four acres and it is anticipated that less than a tenth of this acreage would require fill and/or topsoil treatment:

- Removal of Fairholm store
- Removal of underground fuel tank at Fairholm
- Reconfiguration of Fairholm campground and removal of lakeshore campsites
- Closure of beach at Bovee's Meadow
- Relocation of La Poel picnic sites away from creek
- Removal of existing campsites at La Poel
- Redesign and relocation of Log Cabin Resort buildings
- Closure and revegetation of RV camping area at Log Cabin
- Closure and revegetation of East Beach

Conclusion. Actions proposed in this alternative would restore natural conditions to approximately four acres of presently developed land. Although fill material would be required to restore previously disturbed sites to natural conditions, less than a tenth of this acreage would require fill and/or topsoil treatment.

Vegetation

The following proposed actions would make it possible to restore native vegetation and ecological processes to some presently developed areas:

- Removal of Fairholm store
- Reconfiguration of Fairholm campground and removal of lakeshore campsites
- Removal of existing campsites at La Poel
- Redesign and relocation of Log Cabin Resort buildings
- Closure and revegetation of RV camping area at Log Cabin
- Closure and revegetation of East Beach

Failure to follow facility removal with an active and ongoing revegetation program using native plants and seeds could have the effect of providing favorable conditions for the invasion of nonnative plants and noxious weeds that flourish in disturbed sites around Lake Crescent.

The proposed removal of some facilities and recreational uses could have a beneficial effect on several species of rare plants in nearshore aquatic habitats of Lake Crescent:

- Removal of boat docks and ramps at Fairholm and Log Cabin

- Removal of swimming areas at Fairholm and Bovee's Meadow
- Closure and revegetation of East Beach

Of the project sites listed above, detailed underwater surveys for rare plants have been conducted only at Bovee's Meadow. Here, three rare plants (western quillwort, water lobelia, Illinois pondweed) occur which could be better protected by discouraging swimming and boat launching in the immediate area.

The following projects would reduce direct impacts on vegetation caused by visitor use:

- Reconfiguration of Fairholm campground and removal of lakeshore campsites
- Closure of beach at Bovee's Meadow
- Obliteration/revegetation of social trails between Bovee's Meadow and Barnes Creek
- Elimination of overflow camping at La Poel
- Closure and revegetation of East Beach

Closing La Poel to overflow camping would reduce some of the impacts on vegetation that result from overnight visitation: firewood gathering that strips the forest floor of down woody debris that would otherwise mulch and rot in place; firewood gathering that creates a "human browse line" as trees are stripped of dead (and live) limbs as high as people can reach; tree trunks scarred by random acts of chopping. Such scarring, besides being unsightly, has the added indirect effect of providing infection entry sites for tree diseases, ultimately requiring that trees be removed to mitigate the danger of trees falling on visitors.

In addition to eliminating overnight camping at La Poel, visitor use would be further restricted in the Lake Crescent area through such actions as closing East Beach and the beach at Bovee's Meadow. Revegetation efforts would restore disturbed areas to natural conditions. The proposal to obliterate and revegetate social trails between Bovee's Meadow and Barnes Creek would help decrease vegetation trampling and allow native vegetation to be restored on disturbed sites. Eradication of social trails and construction of new trails would further reduce the potential for vegetation impacts by channeling visitor use along properly designed and maintained trails.

Conclusion. Actions proposed in this alternative would have substantial beneficial effects on the restoration and protection of native vegetation at Lake Crescent. Disturbed and formerly disturbed vegetation would be restored to support native plants and ecological processes. The trend toward more development and net loss of native vegetation would be reversed. Rare aquatic plant species would be put at lower risk from existing facilities and recreational use.

Wildlife

The effects of proposed actions on terrestrial wildlife are expected to be minor and of short duration, but the extent of disturbance would depend on such variables as the location, nearness of the construction site, time of year and species affected. During removal of the following facilities, some animals would be expected to avoid these areas and could possibly abandon nests or dens if construction occurred during critical phases in their breeding cycles. However, timing of construction activities during the year and time of day would do much to mitigate noise impacts:

ENVIRONMENTAL CONSEQUENCES

- Removal of Fairholm store
- Removal of underground fuel tank at Fairholm
- Reconfiguration of Fairholm campground
- Removal of boat docks and ramps at Fairholm and Log Cabin
- Relocation of La Poel picnic sites away from creek
- Removal of existing campsites at La Poel
- Redesign and relocation of Log Cabin Resort buildings
- Closure and revegetation of RV camping area at Log Cabin
- Closure and revegetation of East Beach

Aquatic habitat and wildlife species would benefit from the following proposed actions:

- Removal of lakeshore campsites at Fairholm campground
- Removal of boat docks and ramps at Fairholm and Log Cabin
- Removal of swimming areas at Fairholm and Bovee's Meadow
- Closure of beach at Bovee's Meadow
- Relocation of La Poel picnic sites away from creek
- Redesign and relocation of Log Cabin Resort buildings
- Closure and revegetation of RV camping area at Log Cabin
- Closure and revegetation of East Beach
- Ban on PWC use lakewide

Juvenile trout use the nearshore environment as rearing areas in their first year. Though difficult to quantify, it is likely that removal or reduction of shoreline facilities and activities would have a beneficial effect on fish, especially if the shoreline were restored to a more nearly natural condition.

With fewer facilities for recreational boaters, motorboat use on the lake would also likely decrease, with a resulting decrease in noise and prop wash to disturb wildlife.

Prior to undertaking any proposed action, an assessment of its effects on endangered, threatened, proposed, and candidate animal species would be conducted, with consultation with the U.S. Fish and Wildlife Service as necessary. Protection of these species would receive highest consideration in project planning.

Conclusion. Many of the actions proposed in this alternative would have a beneficial effect on wildlife and its habitat by minimizing human disturbance and intrusions, in addition to restoring disturbed sites to natural conditions. Impacts associated with the removal of some facilities are expected to be minor and of short duration.

CULTURAL RESOURCES

This alternative calls for the development of overall site plans and proposes specific actions for Fairholm, La Poel, Barnes Point, East Beach, Log Cabin, and the North Shore management areas. In areas that have not been previously surveyed, cultural resource inventory and evaluation for historic structures, cultural landscapes, archeological sites, and traditional cultural properties would be required, as would appropriate levels of consultation with the State Historic Preservation Office (see Appendix C). Survey, evaluation and

consultation would be completed prior to taking any action. *The Secretary of the Interior's Standards for Rehabilitation* (NPS 1995b) would guide design work on historic buildings and structures.

Archeological Impacts

This alternative proposes a number of actions that could have an adverse effect on archeological sites (see Appendix C). To avoid or mitigate these impacts, survey, evaluation and consultation would be completed before any action is undertaken.

Historic Structure Impacts

- Moving the Barnes Point administrative functions out of the Storm King Ranger Station (Morgenroth Cabin) and replacing these functions with an all interpretation/orientation focus would impact the historic elements of the cabin interior. The reorganization of the interior spaces would need to be sympathetic to the historic interior and would require compliance with Section 106 of the National Historic Preservation Act.

Cultural Landscape Impacts

North Shore

- Actions proposed for the North Shore management area would impact the Spruce Railroad which is potentially significant as a historic district or cultural landscape. The entire railroad within the park boundaries needs to be inventoried, including all of its associated structures and elements. Once the most important character-defining elements are identified, then the appropriateness of the proposed actions can be evaluated. An overall site plan would be developed to identify the areas where restrooms can be placed with minimal impact to the existing trail. Widening the trail beyond the original railbed width would be detrimental to the overall character and might be difficult to accomplish in some areas. Closing the tunnels off would be a loss and would require mitigation. Some or all of the proposed actions should be able to be accomplished in a sympathetic manner through careful planning and would require Section 106 compliance.

La Poel

- The overall site design at La Poel needs to be sensitive to the remains of resort and CCC development at this location. Survey and evaluation should occur prior to making any decisions regarding camping in the area.

Barnes Point

Barnes Point contains two historic districts, Lake Crescent Lodge and Rosemary Inn.

ENVIRONMENTAL CONSEQUENCES

- The overall site plan at Barnes Point needs to take into consideration the two historic districts and their associated landscapes. The major issue outside the boundaries of the districts is keeping the overall feel of a quiet, peaceful and pedestrian place. A large volume of cars and parking areas would adversely affect the quiet atmosphere.
- The overall trail system at Barnes Point weaves in and out of the two historic districts. The approaches to and the trails throughout the districts need to be compatible with historic pedestrian paths. Developing an overall trail plan at Barnes Point would require Section 106 compliance.

Visitor Services/Facilities

- Prior to establishing U.S. 101 as a parkway incorporating historic elements, research into the design and construction of the highway needs to be accomplished to establish the historic significance of the roadway, including the involvement of the CCC crews. New elements should be designed to be compatible with and not replicate any of the authentic historic elements. Section 106 compliance would be necessary at a minimum to concur that no historic property exists.

Water Recreation

- Noise associated with the use of motorboats has a negative impact on the peaceful atmosphere of both the Rosemary Inn and Lake Crescent Lodge Historic Districts.

Conclusion. In areas that have not been previously surveyed, cultural resource inventory and evaluation for historic structures, cultural landscapes, archeological sites, and traditional cultural properties would be required, as would appropriate levels of consultation with the State Historic Preservation Office. Survey, evaluation and consultation would be completed prior to taking any action. *The Secretary of the Interior's Standards for Rehabilitation* (NPS 1995b) would guide design work on historic buildings and structures.

PARK OPERATIONS/ADMINISTRATION

The reduction of services and facilities proposed in this alternative would decrease some demands on the National Park Service while increasing others. Maintenance such as routine cleaning and servicing, maintaining utility systems and performing needed repairs and painting would no longer be required for:

- Boat docks and ramps at Fairholm and Log Cabin
- Underground fuel tank at Fairholm
- East Beach management area
- Lakeshore campsites at Fairholm campground
- Swimming areas at Fairholm and Bovee's Meadow
- Overflow camping at La Poel

It is likely that increased ranger services for law enforcement, patrol, first aid, and fire protection would be required due to the removal of the following facilities:

- Removal of Fairholm store
- Removal of boat docks and ramps at Fairholm and Log Cabin
- Removal of underground fuel tank at Fairholm
- Removal of lakeshore campsites at Fairholm campground
- Removal of swimming areas at Fairholm and Bovee's Meadow
- Elimination of overflow camping at La Poel
- Closure of RV camping area at Log Cabin
- Closure and revegetation of East Beach

For instance, removing boat docks and ramps would increase the number of informal sites where visitors could launch boats, with inadvertent resource damage as a consequence. Removal of swimming areas would encourage visitors to swim elsewhere around the lakeshore where hazards exist. Boaters fueling their boats from fuel cans instead of commercial pumps would increase the risk of spills into the lake. These changes would require increased ranger vigilance and patrol in order to prevent or respond to accidents and resource damage.

Conclusion. The proposed reduction of visitor services and facilities would decrease some demands on the National Park Service, while increasing others. Some maintenance activities would be reduced or eliminated, whereas increased ranger vigilance and patrol may be necessary to prevent or respond to accidents and resource damage.

VISITOR USE/EXPERIENCE

The intent of this alternative is to emphasize the preservation, and in some cases the restoration, of the natural beauty and resources of Lake Crescent. Consequently, this alternative provides for the removal of some facilities and visitor activities that sustain forms of visitor use incompatible with this intention:

- Removal of Fairholm store
- Removal of boat docks and ramps at Fairholm and Log Cabin
- Removal of underground fuel tank at Fairholm
- Removal of lakeshore campsites at Fairholm campground
- Removal of swimming areas at Fairholm and Bovee's Meadow
- Elimination of overflow camping at La Poel
- Relocation of La Poel picnic sites away from creek
- Removal of RV camping at Log Cabin
- Closure and revegetation of East Beach

Removal of the above facilities and activities would seriously inconvenience or displace those visitors seeking non-wilderness, convenient, well-developed recreational experiences in beautiful, natural-appearing surroundings. Such uses are of long standing at Lake Crescent and are within the mandates and policies of the park. Boat fuel and groceries would not be available anywhere at the lake. Nor would there be camping areas with utility hook-ups available. Boat launching would be possible only at Barnes Point,

ENVIRONMENTAL CONSEQUENCES

creating problems with overcrowded facilities there. Closure of East Beach, the most heavily used swimming area on the entire lakeshore and especially popular with local area residents, would be unacceptable to many visitors.

Conversely, this alternative would best serve those visitors seeking a park experience that is somewhat more primitive, where fewer facilities are provided and where natural conditions prevail. Overall, motorboat use on the lake would likely decrease, due in part to fewer recreational services and facilities and a ban on PWC use, resulting in less noise disturbance to visitors. Canoeing and kayaking would likely become more popular as competition for the lake surface from motorboats decreases.

Several elements proposed in this alternative would serve the recreational needs of visitors better and provide enhanced protection for the natural environment. These actions would remove facilities from sensitive areas such as the lakeshore and yet be more thoughtfully planned and convenient for visitors:

- Reconfiguration of Fairholm campground and removal of lakeshore campsites
- Relocation of Bovee's Meadow picnic area away from beach
- Relocation of La Poel picnic sites away from creek
- Redesign and relocation of Log Cabin Resort buildings

Conclusion. Actions proposed in this alternative would change the scope of the recreational experience at Lake Crescent. Those visitors seeking to enjoy the natural values present would find their experience enhanced by the removal of some facilities and activities and the restoration of natural features. Full implementation of this alternative would disappoint those visitors seeking a quality recreational experience that includes the development of amenities, but preserves the general appearance of a natural setting.

LOW-INCOME AND MINORITY POPULATIONS

Actions proposed in this alternative would have no known effects on low-income or minority populations.

**EFFECTS FROM ACTIONS PROPOSED IN ALTERNATIVE E:
SUBMITTED BY THE FRIENDS OF LAKE CRESCENT**

NATURAL RESOURCES

Air Quality

Impacts on air quality would be similar to those described under Alternative A due to the comparable levels of development. Construction activities could be expected to cause an increase in airborne pollutants over existing levels; however, these increases would be localized, short term, and insignificant in relation to the park's overall air quality.

Construction projects proposed in this alternative would have short-term effects on air quality in the Lake Crescent watershed. There would be exhaust emissions from the gasoline and diesel engines of heavy equipment used to construct:

- Additional parking at Fairholm store, Barnes Point, Log Cabin, East Beach, North Shore picnic area, and Spruce Railroad trailheads
- Picnic area at Fairholm
- Relocation of Fairholm store
- Reconfiguration of Fairholm campground and provide RV hook-ups
- Possible expansion of Lake Crescent Lodge
- Installation of above-ground fuel tanks at Fairholm, Barnes Point, and Log Cabin
- Reconstruction of boat docks at Fairholm, Lake Crescent Lodge, and Log Cabin
- Construction of second boat dock at Barnes Point
- Construction of boat dock and ramp at La Poel and East Beach
- Possible construction of an auxiliary boat ramp at Wallace Point
- Provide accessible restrooms at numerous locations around the lake including Bovee's Meadow, East Beach, North Shore picnic area, Spruce Railroad trailheads, Sledge Hammer Point, and Wallace Point
- Spruce Railroad multi-purpose trail
- Widen, straighten and add bicycle lanes to U.S. 101, East Beach and Piedmont roads; widen Lyre River Road and add bicycle lanes

In addition, construction activities would likely release moderate amounts of dust into the air. Widening of the Spruce Railroad trail to accommodate multiple trail uses could have a more noticeable effect on air quality due to the rock cuts and excavation needed to widen portions of the trail at both tunnel locations. Although air quality would be impaired in the immediate vicinity of construction sites, these impacts would be temporary; conditions existing prior to construction could be expected to return once projects are completed.

Conclusion. Since pollution sources would be temporary, localized, and of small magnitude, there would be no adverse effect on air quality or related values in the Lake Crescent watershed. Overall, it is expected that diminished air quality would have no effect on human health and would result only in minor and temporary impairment of visibility.

Wilderness

Impacts on wilderness would be the same as those described for Alternative A. None of the actions proposed in this alternative would have a direct impact on the surrounding Olympic Wilderness. However, the use of motorized watercraft and vehicles, and the presence of visitor facilities around the lake, would continue to provide a visual and audible reminder of human influence on the landscape. Although it is not anticipated that such intrusions would be noticeably increased under this alternative, they may detract from the wilderness experience of some visitors.

Conclusion. Although none of the proposed actions would have a direct impact on the Olympic Wilderness, indirect impacts such as noise and viewshed impairment in the Lake Crescent area may detract from the wilderness experience of some visitors.

Water Resources

Most concerns regarding impacts on water quality relate to the construction phase of projects. Water quality can be protected to a large extent by avoiding construction during the heavy rain season and through the use of proper construction techniques and procedures to keep silt out of stream drainages and the lake. Runoff from parking areas can be mitigated by good design.

There is a possibility that runoff from construction sites for the following projects could cause short-term siltation of the lake:

- Additional parking at Fairholm store, Barnes Point, Log Cabin, East Beach, North Shore picnic area, and Spruce Railroad trailheads
- Widen, straighten and add bicycle lanes to U.S. 101, East Beach and Piedmont roads; widen Lyre River Road and add bicycle lanes
- Picnic area at Fairholm
- Relocation of Fairholm store
- Reconfiguration of Fairholm campground and provide RV hook-ups
- Possible expansion of Lake Crescent Lodge
- Installation of above-ground fuel tanks at Fairholm, Barnes Point, and Log Cabin
- Reconstruction of boat docks at Fairholm, Lake Crescent Lodge, and Log Cabin
- Construction of second boat dock at Barnes Point
- Construction of boat dock and ramp at La Poel and East Beach
- Possible construction of an auxiliary boat ramp at Wallace Point
- Establishment of a tent camping area at La Poel
- Provide accessible restrooms at numerous locations around the lake including Bovee's Meadow, East Beach, North Shore picnic area, Spruce Railroad trailheads, Sledge Hammer Point, and Wallace Point
- Establishment of a tent camping area at North Shore picnic area
- Spruce Railroad multi-purpose trail

Some proposed actions, such as the removal of the underground fuel tank at Fairholm and the obliteration and revegetation of social trails would have an indirect, beneficial effect of eliminating an existing or potential source of water pollution.

The following projects, which involve asphalt paving, could have direct and indirect effects on water quality in the Lake Crescent watershed:

- Reconfiguration of Fairholm campground
- Widen, straighten and add bicycle lanes to U.S. 101, East Beach and Piedmont roads; widen Lyre River Road and add bicycle lanes

Precipitation runoff mixed with pollutants from asphalt pavement could reach the lake via surface and groundwater flows, though with good design, this effect can be mitigated to a large extent by construction of catchment basins to separate oil from water. Pavement also prevents normal percolation of water into the ground, thus increasing surface flow. Because grades in the area are uniformly steep and few options exist for road realignment, approximately 0.1 acre of undisturbed habitat would be affected; however, any additional paving would contribute cumulatively to the concern for alteration of natural hydrology.

Construction of the following boating facilities would have short- and long-term effects on water quality:

- Reconstruction of boat docks at Fairholm, Lake Crescent Lodge, and Log Cabin
- Construction of second boat dock at Barnes Point
- Construction of boat dock and ramp at La Poel and East Beach
- Possible construction of an auxiliary boat ramp at Wallace Point

During construction, there would be short-term siltation and disturbance of lake bottom sediments at the above project sites. Over the long term, boat fueling and the potential for fuel spills would likely increase since improved boating facilities (e.g., new boat ramps, docks, additional parking for boat trailers) could encourage an increase in the overall amount of boating usage on the lake.

None of the proposed actions would result in permanent changes to floodplains or have an adverse effect on wetland functions or values.

Conclusion. Overall, water quality impacts would be slightly greater compared to Alternative A due to the greater number of boat docks and launch ramps proposed under this alternative. Increased levels of pollutants from parking lot runoff, siltation during construction, and fuel spills and emissions from increased levels of boating could potentially decrease the overall water quality of the lake. However, mitigation measures would be employed to ensure that water quality and other habitat values are not adversely affected.

Geology/Soils

Several construction projects proposed in this alternative would have long-term effects on soils, though in every case, there has been some sort of previous site disturbance. (The nature of the previous disturbance is noted in parentheses):

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- Relocation of Fairholm store (developed area)
- Additional parking at Fairholm store (developed site)
- Reconfiguration of Fairholm campground and provide RV hookups (developed area)
- Installation of above-ground fuel tanks at Fairholm and Log Cabin (previous disturbance)
- Accessible restrooms at numerous locations around the lake including Bovee's Meadow, East Beach, North Shore picnic area, Spruce Railroad trailheads, Sledge Hammer Point, and Wallace Point (previous disturbance)
- Possible expansion of Lake Crescent Lodge (developed site with previous disturbance)
- Additional parking at North Shore picnic area (former resort site)
- Additional parking at Log Cabin (previous development)
- East Beach parking, short-term improvements (reconfiguration of existing parking area)
- East Beach parking, long-term improvements (previous logging activity)
- Parking at east and west trailheads of Spruce Railroad trail (previous disturbance)

Although the above projects represent a permanent alteration to the existing soil structure on these sites, there would be no cumulative change in the total undisturbed acreage committed to development. The combined area of impact for all the above projects is approximately 3-4 acres of previously disturbed ground.

Widening of the Spruce Railroad trail to accommodate multiple trail uses would have a pronounced effect on geologic and soil resources. Parts of the original railroad were cut into steep rock cliffs, with two tunnels dug where required by terrain. These tunnels have been closed and it is infeasible to reopen them for trail use. Widening the present trail for horses, bicycles, wheelchairs and pedestrians would require cutting into undisturbed rock and soils at the two tunnel locations, creating potentially extensive cut slopes that would leave a noticeable scar.

Widening and excavation would not be required where the trail is located on the 12-foot wide railroad grade. Where the trail must leave the railroad grade, widening would be necessary, and require excavation in some instances, such as the approximate 400 linear feet of trail cut into the slope above the railroad grade approximately 0.5-mile west of the eastern trailhead. Excavation would also be required in constructing short access trails above the North Shore Road at the North Shore picnic area and at Fairholm, but the cut slopes in these areas would not be severe, as the soils are much more stable than the loose material at the entrances to the tunnels. The total area of new trail surface would be about one acre, most of which is located on the former railroad right-of-way.

Soil erosion and compaction would continue in those areas heavily used by visitors including Fairholm, Bovee's Meadow, La Poel, East Beach and Log Cabin. Soil compaction restricts the ability for surface water to infiltrate into the ground, which may exacerbate erosion problems. Compacted soils also reduce the movement of oxygen through the soil for plant uptake and result in the loss or declining health of vegetation. However, additional site planning at management areas around the lake, coupled with proposals to obliterate and revegetate social trails in heavily used areas such as Barnes Point would help decrease soil compaction and erosion that presently occurs. Construction of any new trails would further reduce the potential for soil impacts by channeling visitor use along properly designed and maintained trails.

There are no known active seismic faults or other geologic hazards affecting the proposals in this alternative.

Conclusion. Impacts on geology and soils would be similar to those described for Alternative A. Approximately 3-4 acres of previously disturbed soils would be impacted by construction of new facilities. Although these projects represent a permanent alteration to the existing soil structure, there would be no cumulative change in the total undisturbed acreage committed to development. Widening of the Spruce Railroad trail, however, could have a more pronounced effect on undisturbed soils. The total area of new trail surface would be about one acre, most of which is located on the former railroad right-of-way. At the two tunnel locations, the amount of excavation required to achieve a stable cut slope would leave a noticeable scar. Many of the actions proposed in this alternative, including detailed site and trail planning, would help mitigate impacts caused by visitor use.

Vegetation

Vegetation would be affected by nearly every project proposed in this alternative, although in all cases, areas disturbed by construction would be revegetated and landscaped or restored to natural conditions to the extent possible. Some projects would affect vegetation at sites where disturbance has previously occurred and is perpetuated by maintenance practices. Other projects would occur in areas that, though disturbed in the past, have now restored themselves to present a somewhat natural appearance. Finally, lakeshore and aquatic vegetation, including some rare species, would be affected by some of the proposed projects.

By developing campsites at La Poel and the North Shore picnic area and shifting at least some use from day to overnight, there would be indirect effects on vegetation due to camping. Informal social trails would develop to water, wood and scenic resources. Campers foraging for firewood would tend to scour the area not only of dead and down woody materials but also of live and dead limbs from nearby trees. Vegetation would likely be trampled at the sites, leaving bare ground.

The following projects would take place on already disturbed sites where vegetation has been substantially altered and where the changes have been maintained. At these sites, maintenance practices and visitor uses have kept the native vegetation from becoming reestablished. Road shoulders are mowed, vistas are kept open, trampling occurs, and vegetation is manipulated to control exotic species.

- Road improvements on U.S. 101, East Beach, Piedmont and Lyre River roads
- Possible expansion of Lake Crescent Lodge
- Accessible restrooms at numerous locations around the lake including Bovee's Meadow, East Beach, North Shore picnic area, Spruce Railroad trailheads, Sledge Hammer Point, and Wallace Point
- East Beach parking, short-term improvements (reconfiguration of existing parking area)

At many of the project sites listed below, native vegetation has begun to reestablish itself, either by natural processes or through active programs of replanting native species while eliminating exotic (nonnative) plants. Construction at these sites would have a substantial effect on recovering vegetation, both scenically and ecologically. Visual scars from previous construction or prior uses would be reopened. Ecological

ENVIRONMENTAL CONSEQUENCES

processes of succession would be interrupted and set back. As part of every construction project, the unavoidable removal of vegetation could be somewhat mitigated by landscaping and replanting with native vegetation:

- Road improvements on U.S. 101, East Beach, Piedmont, and Lyre River roads
- Relocation of Fairholm store
- Reconfiguration of Fairholm campground
- Possible expansion of Lake Crescent Lodge
- Establishment of a tent camping area at La Poel
- Improvement of beach access at La Poel
- Accessible restrooms at various locations around the lake including Bovee's Meadow, East Beach, North Shore picnic area, Spruce Railroad trailheads, Sledge Hammer Point, and Wallace Point
- Additional parking at Barnes Point, Log Cabin, North Shore picnic area, and East Beach
- Spruce Railroad multi-purpose trail

Failure to rehabilitate disturbed sites with an active and ongoing revegetation program using native plants and seeds could have the effect of providing favorable conditions for the invasion of exotic plants and noxious weeds that flourish in disturbed sites around Lake Crescent.

Vegetation at La Poel, primarily alder trees, which grow thickly along the shoreline of the lake and creek, would be selectively removed to enhance visitor access to these sites. Shoreline vegetation may have been altered during construction and past use of the area, but in recent years has taken on an entirely natural appearance and function. The effect at La Poel would be to convert a section of natural lakeshore to recreational development. This means that more of the Lake Crescent shoreline would be manipulated to accommodate visitors and recreational pursuits.

One project recognizes an ongoing problem with informal shoreline trails and the harmful effects on shoreline plants. Elimination of social trails and construction of new trails would further reduce the potential for vegetation impacts by channeling visitor use along properly designed and maintained trails and revegetating disturbed sites with native species.

Construction and use of a new boat dock and ramp at La Poel and East Beach could affect several species of rare plants (e.g., western quillwort, water lobelia, Illinois pondweed) in nearshore aquatic habitats of Lake Crescent. Before any actions occur at these sites, thorough surveys would be conducted and appropriate measures taken to protect rare plants.

Conclusion. Impacts on vegetation would be similar to those described for Alternative A, with the exception that rare aquatic plant species could be put at added risk from the construction and use of new boat docks and ramps at La Poel and East Beach. More acreage of undisturbed and formerly disturbed vegetation would be permanently converted and committed to recreational development. Some landscapes would cease to be the product of natural processes and would be maintained as manipulated sites. Construction of new facilities would disturb or eliminate vegetation from 3-4 acres of previously altered terrain. Approximately one acre of presently undisturbed vegetation would be lost due to construction of the Spruce Railroad trail. To help mitigate vegetation impacts, disturbed areas would be revegetated with native species and restored to natural conditions to the extent possible.

Wildlife

Prior to undertaking any proposed action, an assessment of its effects on endangered, threatened, proposed, and candidate animal species would be conducted, with consultation with the U.S. Fish and Wildlife Service as necessary. Protection of these species would receive highest consideration in project planning.

The effects of construction on known wildlife populations would be primarily due to disturbance of individual animals and loss of additional habitat. The following proposed projects would likely cause disturbance to wildlife from noise and human presence during actual construction:

- Road improvements on U.S. 101, East Beach, Piedmont, and Lyre River roads
- Additional parking at Fairholm store, Barnes Point, Log Cabin, East Beach, North Shore picnic area, and Spruce Railroad trailheads
- Reconfiguration of Fairholm campground
- Possible expansion of Lake Crescent Lodge
- Establishment of a tent camping area at La Poel
- Improvement of beach access at La Poel
- Accessible restrooms at numerous locations around the lake including Bovee's Meadow, East Beach, North Shore picnic area, Spruce Railroad trailheads, Sledge Hammer Point, and Wallace Point
- Reconstruction of boat docks at Fairholm, Lake Crescent Lodge, and Log Cabin
- Construction of second boat dock at Barnes Point
- Construction of boat dock and ramp at La Poel and East Beach
- Possible construction of an auxiliary boat ramp at Wallace Point
- Spruce Railroad multi-purpose trail

Possible effects of construction noise and other activity on wildlife would depend on such variables as the location, nearness of the construction site, time of year and species affected. Most animals would be expected to avoid these areas during construction and may abandon nests or dens if construction occurred during critical phases in their breeding cycles. In some instances, permanent displacement of individuals could occur due to the loss of nesting or denning sites, roost sites, protective cover, or a decline of food sources. For the most part, however, construction impacts would be short term and minor. Timing of construction during the year and time of day would do much to mitigate noise impacts.

The proposed ban on PWC use is likely to have a beneficial effect on wildlife by decreasing the potential for human disturbance.

Those projects that involve work in the riparian zone and in the lake would be expected to impact water quality and fish and aquatic resources through turbid runoff, siltation, and disruption of the substrate. Any projects that remove lakeshore vegetation or convert shallow, low-gradient beaches to steep, hardened banks would disrupt fish spawning and rearing habitat. Timing of construction activities and careful siting could partially mitigate some of these impacts at the following sites:

- Reconstruction of boat docks at Fairholm, Lake Crescent Lodge, and Log Cabin
- Construction of second boat dock at Barnes Point

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- Construction of boat dock and ramp at La Poel and East Beach
- Possible construction of an auxiliary boat ramp at Wallace Point

Clearing of lakeside vegetation at La Poel would remove critical shade and a source of woody debris along the lakeshore. These two natural processes are important in the formation of habitat for juvenile trout. Due to lakeside development elsewhere around the lake, such habitat is in short supply and any addition to the cumulative loss must be regarded as serious.

Conclusion. Impacts on wildlife would be similar to those described for Alternative C. Many of the proposed projects would have short-term disturbance effects on wildlife during construction, while others would have a long-term or permanent effect due to loss of habitat. Although the effects of most projects on wildlife are not anticipated to be significant due to the small acreages involved, the proximity to existing development, and the availability of undisturbed habitat nearby, any loss of habitat for juvenile trout must be regarded as serious. A ban on PWC use is likely to have a beneficial effect on wildlife by decreasing the potential for human disturbance.

CULTURAL RESOURCES

This alternative calls for the development of overall site plans and proposes specific actions for Fairholm, La Poel, Barnes Point, East Beach, Log Cabin, and the North Shore management areas. In areas that have not been previously surveyed, cultural resource inventory and evaluation for historic structures, cultural landscapes, archeological sites, and traditional cultural properties would be required, as would appropriate levels of consultation with the State Historic Preservation Office (see Appendix C). Survey, evaluation and consultation would be completed prior to taking any action. *The Secretary of the Interior's Standards for Rehabilitation* (NPS 1995b) would guide design work on historic buildings and structures.

Archeological Impacts

This alternative proposes a number of actions that could have an adverse effect on archeological sites (see Appendix C). To avoid or mitigate these impacts, survey, evaluation and consultation would be completed before any action is undertaken.

Cultural Landscape Impacts

North Shore

- Actions proposed for the North Shore management area would impact the Spruce Railroad which is potentially significant as a historic district or cultural landscape. The entire railroad within the park boundaries needs to be inventoried, including all of its associated structures and elements. Once the most important character-defining elements are identified, then the appropriateness of the proposed actions can be evaluated. An overall site plan would be developed to identify the areas where restrooms can be placed with minimal impact to the existing trail. Widening the trail beyond the original railbed width would be detrimental to the overall character and might be difficult to

accomplish in some areas. Closing the tunnels off would be a loss and would require mitigation. Some or all of the proposed actions should be able to be accomplished in a sympathetic manner through careful planning and would require Section 106 compliance.

La Poel

- The overall site design at La Poel needs to be sensitive to the remains of resort and CCC development at this location. Survey and evaluation should occur prior to making any decisions regarding camping in the area.

Barnes Point

Barnes Point contains two historic districts, Lake Crescent Lodge and Rosemary Inn.

- The overall site plan at Barnes Point needs to take into consideration the two historic districts and their associated landscapes. The major issue outside the boundaries of the districts is keeping the overall feel of a quiet, peaceful and pedestrian place. A large volume of cars and parking areas would adversely affect the quiet atmosphere.
- The overall trail system at Barnes Point weaves in and out of the two historic districts. The approaches to and the trails throughout the districts need to be compatible with historic pedestrian paths. Developing an overall trail plan at Barnes Point would require Section 106 compliance.
- The concession option to increase the number of Lake Crescent lodging units by 10% would require a study of the impacts of the additional people and vehicles in the lodge area. The overall building design and site layout would require careful consideration to not adversely impact the pedestrian quality of the district. Section 106 compliance would be required.

Water Recreation

- Noise associated with the use of motorboats has a negative impact on the peaceful atmosphere of both the Rosemary Inn and Lake Crescent Lodge Historic Districts.

Conclusion. In areas that have not been previously surveyed, cultural resource inventory and evaluation for historic structures, cultural landscapes, archeological sites, and traditional cultural properties would be required, as would appropriate levels of consultation with the State Historic Preservation Office. Survey, evaluation and consultation would be completed prior to taking any action. *The Secretary of the Interior's Standards for Rehabilitation* (NPS 1995b) would guide design work on historic buildings and structures.

PARK OPERATIONS/ADMINISTRATION

The additional services and facilities proposed in this alternative would create added demands on the National Park Service. Additional maintenance would be required for the following new construction:

- Picnic area at Fairholm
- New boat dock and ramp at East Beach
- Second boat dock at Barnes Point
- Possible construction of an auxiliary boat ramp at Wallace Point
- New boat dock and ramp at La Poel
- Establishment of a tent camping area at La Poel
- Accessible restrooms at various locations around the lake including Bovee's Meadow, East Beach, North Shore picnic area, Spruce Railroad trailheads, Sledge Hammer Point, and Wallace Point
- Additional parking at Log Cabin and East Beach
- Establishment of a tent camping area at North Shore picnic area
- Spruce Railroad multi-purpose trail

Maintenance at the above facilities would include such activities as routine cleaning and servicing, maintaining utility systems and performing needed repairs and painting. In contrast, the removal of the underground fuel tank at Fairholm would reduce maintenance needs at that site.

Increased ranger services for law enforcement, patrol, first aid, and fire protection would be required in response to new and mixed uses for the following actions:

- Tent camping area at La Poel
- Designated swimming area at La Poel
- New boat dock and ramp at La Poel
- Possible construction of an auxiliary boat ramp at Wallace Point
- Launch area with boat ramp and dock at East Beach
- Additional parking at East Beach
- Tent camping area at North Shore picnic area
- Spruce Railroad multi-purpose trail

Conversely, providing visitor facilities at planned and convenient locations would tend to decrease the incidence of certain visitor activities occurring randomly around the lake. For instance, providing boat docks and ramps would reduce the number of informal sites where visitors now launch boats along with the inadvertent resource damage that typically accompanies such use. Widening roads to accommodate bicycle lanes would reduce the potential for car/bicycle accidents. With increased usage and overnight visitor capacities, increased demands for interpretive facilities and services could also be expected.

Conclusion. With additional facilities to protect and maintain and with a possible increase of visitors attracted to improved facilities, it would be necessary for the park to increase its staffing. The new staffing level would be similar to that of Alternative C. Without increases to the overall park staff and budget, additional staff would have to come from other areas of the park.

VISITOR USE/EXPERIENCE

This alternative contains many proposals designed to expand and enhance the variety and number of recreational opportunities at Lake Crescent. Proposed new experiences and opportunities that have not existed in the recent past include RV hookups at Fairholm campground and snack bar concessions at East Beach and La Poel. Another new activity, though not recreational in nature, would explore the use of a citizens' auxiliary to assist NPS rangers in patrolling the lake. This alternative also provides for the continuation of several existing forms of recreation, including overnight camping at La Poel and lakeshore camping at Fairholm.

Specific recreational opportunities included in this alternative that have not existed before, or which have been informal are:

- Designate a picnic area at Fairholm
- Convert current Fairholm store parking lot into a scenic overlook with interpretive display
- Reconfigure Fairholm campground to separate tent and RV sites; provide RV hook-ups
- Bicycle rental at Fairholm
- Bicycle lanes along U.S. 101, East Beach, Piedmont, and Lyre River roads
- Install an above-ground fuel tank and offer boat fuel sales at Barnes Point boat ramp
- Determine the need for seasonal, trailer-mounted snack bar concessions at La Poel and East Beach
- Construct boat launch areas (to include a boat ramp and dock) at La Poel and East Beach
- Possible construction of an auxiliary boat ramp at Wallace Point
- Improve beach access at La Poel by selective removal of shoreline vegetation
- Designate a swimming area at La Poel
- Erect an interpretive kiosk at La Poel to interpret the CCC and resort history of the area
- Designate a tent camping area at North Shore picnic area
- Consider the establishment of an interpretive program focused on Euroamerican settlement of the Lake Crescent area

Other projects would provide added convenience or opportunity for a higher volume of visitation without changing the type of use at a specific site:

- Additional parking at Fairholm store, Barnes Point, Log Cabin, East Beach, North Shore picnic area, and Spruce Railroad trailheads
- Relocation of Fairholm store
- Installation of above-ground fuel tanks at Fairholm and Log Cabin
- Repair or replacement of existing dock at Lake Crescent Lodge
- Possible expansion of Lake Crescent Lodge
- Accessible restrooms at various locations around the lake including Bovee's Meadow, East Beach, North Shore picnic area, Spruce Railroad trailheads, Sledge Hammer Point, and Wallace Point
- Construct a small boat dock (in addition to the existing dock) at the Barnes Point boat ramp
- Construct additional parking for boat trailers and tow vehicles at Barnes Point
- Reconstruct boat docks at Fairholm and Log Cabin
- Reserve lakeshore in front of the main lodge at Log Cabin Resort for day use

ENVIRONMENTAL CONSEQUENCES

- Offer boat fuel sales at Log Cabin; install an above-ground fuel tank for that purpose
- Change the fishing regulations to allow young anglers to keep smaller fish

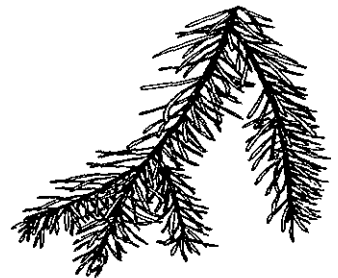
Several projects are designed to improve the quality or safety of the visitor experience at existing sites:

- Campground reconfiguration at Fairholm
- Develop overall trail plans for Fairholm, Barnes Point, La Poel, East Beach and the North Shore picnic area; improve existing trails, construct new trails as appropriate, selectively obliterate social trails and revegetate
- Explore the use of a citizens' auxiliary to assist NPS rangers in patrolling the lake
- Construction of accessible restrooms at various locations around the lake including Bovee's Meadow, East Beach, North Shore picnic area, Spruce Railroad trailheads, Sledge Hammer Point, and Wallace Point

Conclusion. During the construction phase of many of these projects, some short-term inconvenience for park visitors and area residents would be expected, including temporary closures, noise and impaired visibility. Over the long term, there would be a greater number of developed recreational facilities and opportunities at Lake Crescent. However, recreational activities and experiences that depend on unspoiled natural conditions, a quiet ambience and low volumes of visitation are not enhanced by this alternative, and in many cases, would be diminished.

LOW-INCOME AND MINORITY POPULATIONS

Actions proposed in this alternative would have no known effects on low-income or minority populations.



Consultation and Coordination

CONSULTATION AND COORDINATION FOR THE DRAFT AND FINAL LAKE CRESCENT MANAGEMENT PLAN/ENVIRONMENTAL IMPACT STATEMENT

HISTORY OF PUBLIC INVOLVEMENT

Scoping

The National Park Service announced its intent to initiate a planning effort for the Lake Crescent area of Olympic National Park, Washington with a press release issued on June 19, 1995. A scoping meeting was held in Port Angeles, Washington on July 11, 1995 to gather public input on planning issues and concerns. The meeting was facilitated by Keith Dunbar, Team Leader for Planning and Partnerships, of the NPS's Columbia Cascades Support Office in Seattle. Information about the planning area, major issues affecting it, and an overview of management objectives for the Lake Crescent area preceded the public comment session. Approximately 50 people attended the meeting. Comment forms were made available to all attendees, with an invitation for written comments to be sent to the park by July 23, 1995. Thirty-eight written comments were received at the park, including 23 form letters.

Major issues identified by the public through the scoping process are outlined below.

- **Private Landowner Rights and Concerns.** The majority of written and oral comments dealt with the concerns of private landowners around the lake and asked that planning efforts be sensitive to and respectful of private property rights. Specifically, they asked that care be taken to ensure that private landowners would not be impacted by increased access or visitation to the lake. Increased fire protection and road maintenance along the East Beach and North Shore Roads were also identified as important issues. Control or removal of hazardous trees, plants, and animals was seen as a priority. Some commenters asked that the park do more to educate landowners about the water quality risks associated with the use of lawn fertilizer on lakefront property.
- **Water Recreation.** Several different viewpoints were expressed regarding water recreation, particularly concerning the use of motorboats and personal watercraft (PWC). Some individuals expressed the desire for a more pristine and peaceful setting for Lake Crescent and called for a ban on PWC and more restrictions on the use of motorboats, while others commented on the tradition of motorized recreation on Lake Crescent and called for its continuation without change, regulation or restriction.
- **Fishing Regulations.** Some commenters expressed the viewpoint that the park's fishing regulations for Lake Crescent are damaging to the population of Beardslee trout.
- **Lake Area Facilities.** The need for additional campsites was cited by several people, including the need for campsites to be restored at La Poel, which is currently designated as a day-use area. The continuation of fuel and other sales at the Fairholm store was seen as a high priority among some individuals.
- **Non-Motorized Vehicle Access.** Several commenters called for improved access for bicyclists around Lake Crescent. While some felt that an alternative to U.S. 101 (including improvements

to East Beach Road and the Spruce Railroad grade) was necessary, others expressed the viewpoint that the addition of a bike lane to U.S. 101 would be a better solution.

During preparation of the draft plan, park and NPS personnel at the Columbia Cascades Support Office in Seattle concluded that the scope and complexity of the plan warranted the preparation of an environmental impact statement (EIS), rather than an environmental assessment, as had been originally planned. This decision was announced to the public in the *Federal Register* on June 7, 1996, and with a press release issued on June 13, 1996. Scoping comments gathered the previous summer had already been incorporated into the draft plan. In addition, a second 36-day scoping period was announced in the June 13 press release. This second scoping period closed on July 19, 1996.

Public Review of the Draft EIS

In July 1996, informational posters were hung at five sites in the Lake Crescent area and one in downtown Port Angeles. The posters contained basic information about the Lake Crescent planning process and provided space for interested individuals to add their name to the mailing list. Approximately 330 people were added to the mailing list through this effort.

A newsletter was also sent to 481 government agencies, organizations and individuals on the mailing list in September 1996. The newsletter advised the public that the draft plan would soon be ready for release and provided information about the upcoming review period. Recipients were requested to respond if they wanted to receive a copy of the plan.

The National Park Service released the *Draft Lake Crescent Management Plan/EIS* on October 7, 1996. The document's availability was announced to the public by two notices published in the *Federal Register* on October 18 and 21, 1996. Approximately 550 copies of the draft plan were distributed to government officials, agencies, businesses, public libraries, media representatives, special interest groups, and individuals (refer to list of document recipients at the end of this section).

The public review period, initially scheduled for 60 days, was to close on December 18, 1996. However, in response to widespread public interest, the review period was extended twice for 45 days each, bringing the total length of review time to 150 days. The first extension of the review period was announced in the *Federal Register* on November 18, 1996 and November 22, 1996. The second extension was announced in the *Federal Register* on December 26, 1996. Both extensions to the review period were also announced by press releases issued by Olympic National Park on November 5, 1996 and on December 13, 1996. The information contained in the press releases was printed in local newspapers and broadcast on local cable TV and radio stations. The public review period closed on March 19, 1997.

Record of Public Comment

Comments were received orally and in writing at two public meetings held in January 1997, and in writing during the 150-day public review period following release of the *Draft Lake Crescent Management Plan/EIS*. All comments were examined and considered by the National Park Service according to the requirements of 40 CFR 1503 (the implementing regulations for the National Environmental Policy Act).

Responses to those comments that were “substantive”, and not simple statements for or against elements of the proposed plan, can be found in the “Comments and Responses” section of this document.

Written Comments. During the comment period, 1,943 letters were received from governing bodies, government agencies, businesses, special interest groups and individuals. Of these, 555 were form letters, 14 were petitions and 1,374 were individual letters. The National Park Service has prepared written responses for more than 400 substantive questions and/or comments requiring clarification of information contained in the draft plan, changes to the text or direct responses.

All letters received from organizations and government agencies and a representative sampling of letters from individuals and businesses are reprinted in the “Comments and Responses” section of this document. Because of the volume and similarity of comments received, substantive comments from individuals and businesses have been summarized by topic according to 40 CFR 1503.4. These comments and the agency responses can also be found in the “Comments and Responses” section.

Public Meetings. Two public meetings were held during the document review period to allow the public to ask questions regarding the *Draft Lake Crescent Management Plan/EIS* and to submit oral and written comments about it. The meetings were originally scheduled for November 20 in Seattle and November 21 in Port Angeles, but were rescheduled because of a winter storm. These meetings were later held on January 15 in Seattle and January 16 in Port Angeles. Both meetings were facilitated by Keith Dunbar of the NPS’s Columbia Cascades Support Office.

At each meeting, a brief overview and background of the Lake Crescent planning process was presented, along with a summary of issues addressed in the plan and the range of planning alternatives considered. Following this introduction, meeting participants were asked to direct their questions and comments to six workgroups, each of which focused on a particular topic. The workgroup topics were: Natural Resources, Cultural and Historic Resources, Land-based Recreation and Transportation, Water-based Recreation, Landowner Concerns, and General Concerns. A facilitator in each group moderated the discussion, while another individual summarized and recorded issues, comments and questions. Prior to the close of the meeting, the entire group reconvened and each workgroup presented a summary of its discussion to all meeting participants. Responses to substantive comments received during the public meetings are included in the “Comments and Responses” section of this document. Locations of the public meetings and approximate numbers of people attending are as follows:

Seattle, Washington, January 15, 1997, 7:00 - 9:30 p.m.: 100 people
Port Angeles, Washington, January 16, 1997, 7:00 - 9:30 p.m.: 400 people

In response to a request made at the January 16 meeting, a written transcript of all oral comments recorded at the two public meetings was distributed to area libraries and NPS offices on January 31, 1997. Availability of the transcripts was announced in a press release also issued on that date.

CONSULTATION WITH THE U.S. FISH AND WILDLIFE SERVICE

Section 7 of the Endangered Species Act prohibits federal agencies such as the National Park Service from implementing any action that is likely to jeopardize the continued existence of a federally protected (endangered, threatened) species. Further, the act requires that the National Park Service consult with the U.S. Fish and Wildlife Service (USFWS) in any action it authorizes, funds, or executes that could potentially affect a protected species or its designated critical habitat.

To help meet its responsibilities under the Endangered Species Act, the National Park Service has consulted with the USFWS Western Washington Office, Endangered Species Program, to identify those listed plant and animal species that may occur within the Lake Crescent watershed. In addition, a copy of the *Draft Lake Crescent Management Plan/EIS* was sent to the Fish and Wildlife Service for concurrence that the broad-scale elements of the proposed action would not adversely affect any listed species known or suspected to be in the planning area. On April 3, 1998, in a telephone conversation between Paul Crawford, Natural Resources Management Specialist at Olympic National Park, and John Gretenberger, Wildlife Biologist with the USFWS Western Washington Office, Mr. Gretenberger stated that the Fish and Wildlife Service concurred with the National Park Service's effect determination. In the future, as specific elements of the plan are implemented, assessments of their effects on threatened, endangered, proposed, and candidate species would be conducted, with further consultation with the Fish and Wildlife Service undertaken, as needed.

COORDINATION WITH THE LOWER ELWHA KLALLAM AND QUILEUTE TRIBES, AND THE WASHINGTON STATE HISTORIC PRESERVATION OFFICE

During the course of this planning effort, the National Park Service has consulted with the Lower Elwha Klallam and Quileute tribes, and the Washington State Historic Preservation Office (SHPO). A copy of the *Draft Lake Crescent Management Plan/EIS* was sent to each of these offices to initiate and plan for coordination of survey, eligibility, effect, and mitigation of possible cultural resources in the Lake Crescent area. All actions to be implemented that could affect historic properties as defined in the National Historic Preservation Act would be evaluated through consultation with the SHPO. These actions include, but are not limited to, proposed changes to historic buildings or districts and ground-disturbing activities.

**LIST OF AGENCIES, ORGANIZATIONS, AND BUSINESSES TO WHOM
COPIES OF THE DRAFT OR FINAL LAKE CRESCENT MANAGEMENT PLAN/
ENVIRONMENTAL IMPACT STATEMENT WERE SENT**

FEDERAL AGENCIES AND OFFICES

Environmental Protection Agency, Seattle Office
National Park Service, Columbia Cascades Support Office, Seattle, WA
National Park Service, Pacific West Field Area, San Francisco, CA
National Park Service, Washington, D.C.
Olympic Coast National Marine Sanctuary
Olympic National Forest - Planning Staff Officer and Soleduck Ranger District
U.S. Coast Guard - USCG Air Station Port Angeles
U.S. Fish and Wildlife Service, Western Washington Office, Endangered Species Program, Olympia, WA

TRIBAL GOVERNMENTS

Lower Elwha Klallam Tribe

STATE AGENCIES

Lake Perris State Recreation Area, Perris, CA
Washington State Interagency Committee for Outdoor Recreation
Washington State Department of Community Trade & Economic Development
Washington State Department of Fish and Wildlife
Washington State Department of Transportation, Olympic Region
Washington State Office of Archeology and Historic Preservation

MEMBERS OF CONGRESS

Honorable Norm Dicks
Honorable Slade Gorton
Honorable Patty Murray

MEMBERS OF WASHINGTON STATE LEGISLATURE

Senator Jim Hargrove
Representative Jim Buck
Representative Lynn Kessler

COUNTY AND LOCAL GOVERNMENTS

City of Port Angeles
City of Forks
City of Longview
City of Sequim
Clallam County Commissioners' Office
Clallam County Parks Department
Clallam County Park Camp David Junior
Clallam County Parks, Fair & Building Maintenance Department
San Juan County Board of Commissioners
Spokane County Marine Enforcement

ORGANIZATIONS AND BUSINESSES

Angeles Collision
Buchanan Ingersoll
Cape George Hiking Group
Cascade Conservation League
Chequamegon Audubon Society
Central Sierra Environmental Resource Center
Clallam County Economic Development Council
Dungeness Valley Association
Fairholm Store and Cafe
Forks Chamber of Commerce
Foster Wheeler Environmental
Friends of Lake Crescent
Friends of the Earth
Hells Canyon Preservation Council
Inland Northwest Wildlife Council
International Jet Sports Boating Association
Kirkland Woman's Club
Klahhane Club
Lake Crescent Lodge
Log Cabin Resort
Lost Lake Water Patrol
The Mountaineers
Mount Rainier National Park Associates
Mount Rainier, North Cascades & Olympic Fund
National Marine Manufacturers Association
National Outdoor Leadership School
National Parks & Conservation Association, Pacific NW Regional Office
National Park Concessions, Inc.
Nisqually Delta Association
North Cascades Conservation Council

North Olympic Peninsula Visitor & Convention Bureau
Northwest Ecosystem Alliance
Northwest Marine Trade Association
Olympic Outdoor Sportsmen's Association
Olympic Park Associates
Olympic Park Institute
Olympic Peninsula Audubon Society
Olympic Raft & Guide Service
Peninsula Environmental Center
Port Angeles Chamber of Commerce
Rivers Council of Washington
Seattle Audubon Society
Seattle Garden Club
Sequim Chamber of Commerce
Sierra Club, Cascade Chapter
Sierra Club, Delta Chapter
Southern Willamette Earth First!
Spokane Canoe & Kayak Club, Inc.
Tacoma Mountaineers
Tahoma Audubon Society
U.S. Coast Guard Auxiliary, Sequim, Washington
Washington Kayak Club
Washington Wilderness Coalition
The Wilderness Society

LIBRARIES

Kitsap Regional Library, Bremerton Branch
North Olympic Library System
 Clallam Bay Branch
 Forks Branch
 Port Angeles Branch
 Sequim Branch
Port Townsend Public Library
Seattle Public Library
Tacoma Public Library
Timberland Regional Library
 Aberdeen Branch
 Amanda Park Branch

ACADEMIC INSTITUTIONS

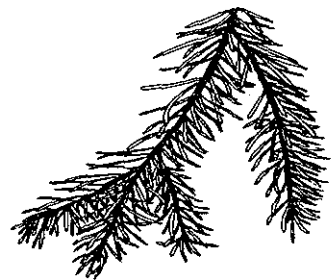
Colorado State University
The Evergreen State College

CONSULTATION AND COORDINATION

Northwestern University, Institute for Policy Research
University of Puget Sound
University of Washington
Western Washington University

MEDIA

Forks Forum, Forks, WA
KBGE TV 33, Seattle, WA
KONP Radio, Port Angeles, WA
Northland Cable News, Port Angeles, WA
Peninsula Daily News, Port Angeles, WA
The Sun, Bremerton, WA
Seattle Post-Intelligencer
Seattle Times



Comments and Responses

REVIEW AND ANALYSIS OF COMMENTS RECEIVED ON THE DRAFT LAKE CRESCENT MANAGEMENT PLAN/ENVIRONMENTAL IMPACT STATEMENT

INTRODUCTION

This section includes a summary of written and oral comments received during the 150-day public review period following release of the *Draft Lake Crescent Management Plan/EIS* in October 1996. All oral and written comments were considered by the National Park Service according to the requirements of the *Code of Federal Regulations* (CFR), title 40, part 1503.

PUBLIC REVIEW OF THE DRAFT EIS

The National Park Service released the *Draft Lake Crescent Management Plan/EIS* on October 7, 1996. The document's availability was announced to the public by two notices published in the *Federal Register* on October 18 and 21, 1996. Approximately 550 copies of the draft plan were distributed to government officials, agencies, businesses, public libraries, media representatives, special interest groups, and individuals.

The public review period, initially scheduled for 60 days, was to close on December 18, 1996. However, in response to widespread public interest, the review period was extended twice for 45 days each, bringing the total length of review time to 150 days. The first extension of the review period was announced in the *Federal Register* on November 18, 1996 and November 22, 1996. The second extension was announced in the *Federal Register* on December 26, 1996. Both extensions to the review period were also announced by press releases issued by Olympic National Park on November 5, 1996 and on December 13, 1996. The information contained in the press releases was printed in local newspapers and broadcast on local cable TV and radio stations. The public review period closed on March 19, 1997.

CHANGES TO THE NPS PROPOSED ACTION (ALTERNATIVE A) IN RESPONSE TO COMMENTS ON THE DRAFT LAKE CRESCENT MANAGEMENT PLAN/EIS

In response to public comment received, as well as additional issues raised and further impact analysis, several changes have been made to the NPS proposed action (Alternative A) since publication of the draft and final plans. These changes are summarized below by topic:

Management Areas

- Common to All:
- Develop an overall trail plan for each management area (*added*)
- Fairholm:
- Designate a picnic area (*deleted*)
- Barnes Point:
- Establish a buoyed swimming area at Bovee's Meadow (*deleted*)
 - Repair or replace existing dock at Lake Crescent Lodge (*added*)
 - Investigate the feasibility of increasing the number of units (rooms) at Lake Crescent Lodge, not to exceed a 10 percent increase in units (*revised*)

COMMENTS AND RESPONSES

- Log Cabin:
- Reserve the lakefront for day use (*deleted*)
 - Consider establishing an interpretation/orientation program focusing on Euroamerican settlement in the Lake Crescent area (*added*)
 - Replace some RV camping with cabins (*revised*)

- La Poel:
- Investigate the feasibility of establishing tent camping sites (*added*)

- North Shore:
- Develop backcountry walk-in or bike-in camping sites (*deleted*)
 - Gate the North Shore Road past the picnic area (*deleted*)
 - Analyze parking needs and provide for modest expansion at east and west ends of Spruce Railroad trail (*added*)
 - Develop interpretive displays at each end of the Spruce Railroad trail (*revised*)

Visitor Services/Facilities

- Provide additional restroom facilities throughout the Lake Crescent area (*clarified*)

Water Recreation

- Prohibit the use of personal watercraft (PWC) on Lake Crescent (*added*)
- Allow PWCs within zoned areas only (*deleted*)
- Investigate the use of a citizens' auxiliary to assist Olympic National Park in patrolling the lake (*added*)
- Establish a 40-mph speed limit for motorized watercraft (*revised*)

RECORD OF PUBLIC COMMENT

Comments were received orally and in writing at two public meetings held in January 1997, and in writing during the 150-day public review period following release of the *Draft Lake Crescent Management Plan/EIS*. All comments were examined and considered by the National Park Service according to the requirements of 40 CFR 1503 (the implementing regulations for the National Environmental Policy Act). Responses to those comments that were "substantive", and not simple statements for or against elements of the proposed plan, are included in this document. A substantive comment is defined as a comment that:

- questions, with reasonable basis, the accuracy of information in the EIS
- questions, with reasonable basis, the adequacy of the environmental analysis
- presents reasonable alternatives other than those presented in the EIS
- causes changes or revisions in the proposal

While all comments were considered by the planning team when determining appropriate revisions to be made to the draft alternatives and in overall management direction, the comments were not regarded as part of a voting process or statistical study.

Public Meetings

Two public meetings were held during the document review period to allow the public to ask questions regarding the *Draft Lake Crescent Management Plan/EIS* and to submit oral and written comments about it. The meetings were originally scheduled for November 20 in Seattle and November 21 in Port Angeles, but were rescheduled because of a winter storm. These meetings were later held on January 15 in Seattle and January 16 in Port Angeles and were attended by approximately 100 and 400 people, respectively. Both meetings were facilitated by Keith Dunbar of the NPS's Columbia Cascades Support Office.

At each meeting, a brief overview and background of the Lake Crescent planning process was presented, along with a summary of issues addressed in the plan and the range of planning alternatives considered. Following this introduction, meeting participants were asked to direct their questions and comments to six workgroups, each of which focused on a particular topic. The workgroup topics were: Natural Resources, Cultural and Historic Resources, Land-based Recreation and Transportation, Water-based Recreation, Landowner Concerns, and General Concerns. A facilitator in each group moderated the discussion, while another individual summarized and recorded issues, comments and questions. Prior to the close of the meeting, the entire group reconvened and each workgroup presented a summary of its discussion to all meeting participants. Responses to substantive comments received during the public meetings are included in this document.

Written Comments

During the comment period, 1,943 letters were received from governing bodies, government agencies, businesses, special interest groups and individuals. Of these, 555 were form letters, 14 were petitions and 1,374 were individual letters. The National Park Service has prepared written responses for more than 400 substantive questions and/or comments requiring clarification of information contained in the draft plan, changes to the text or direct responses.

The majority of written comments received on the draft plan focused on PWC use on Lake Crescent. All letters received from organizations and government agencies along with the agency responses are reproduced in this document (responses are located in a separate section immediately following the letters and are numbered to correspond with the bracketed comments). In accordance with 40 CFR 1503.4, substantive comments may be summarized when the response has been especially voluminous. Because of the volume (1,943 letters) and similarity of comments received, substantive comments from individuals and businesses that have been previously unaddressed in the responses to comments raised at the two public meetings or in letters received from agencies and organizations have been summarized by topic and included in the following pages. This action has been taken to reduce paperwork, to streamline the planning process, and to reduce printing costs. A sampling of letters from individuals and businesses, representing the range of opinions expressed, is also reproduced. All of the original comment letters are on file at park headquarters at Olympic National Park.

RESPONSES TO PUBLIC MEETING COMMENTS

Two public meetings were held during the document review period to allow the public to ask questions regarding the *Draft Lake Crescent Management Plan/EIS* and to submit oral and written comments about it. The meetings were held on January 15, 1997 in Seattle and January 16, 1997 in Port Angeles. Meetings were attended by approximately 100 people in Seattle and 400 people in Port Angeles.

At each meeting, a brief overview and background of the Lake Crescent planning process was presented, along with a summary of issues addressed in the plan and the range of planning alternatives considered. Following this introduction, meeting participants were asked to direct their questions and comments to six workgroups, each of which focused on a particular topic. The workgroup topics were: Natural Resources, Cultural and Historic Resources, Land-based Recreation and Transportation, Water-based Recreation, Landowner Concerns, and General Concerns. A facilitator in each group moderated the discussion, while another individual summarized and recorded issues, comments and questions. Prior to the close of the meeting, the entire group reconvened and each workgroup presented a summary of its discussion to all meeting participants.

Responses to comments raised at both public meetings are provided below. Comments have been consolidated to avoid redundancy and are grouped together by workgroup topic.

NATURAL RESOURCES

Fisheries

1. *Comment:* What are the fisheries concerns at Lake Crescent?

Response: There are five primary concerns for the fish resources in Lake Crescent: (1) the extent to which the lake's trout may have declined from historic levels and the direction of current trends; (2) the amount of hybridization between native and nonnative trout planted into the lake; (3) population size and factors which influence the lake's kokanee; (4) impacts to trout spawning areas, especially in the Lyre River; and (5) impacts to the lake's shoreline where kokanee spawn, juvenile trout rear for their first year, and where much of the lake's productivity occurs.

2. *Comment:* Why is fishing not addressed in this plan?

Response: Since fishing regulations are subject to change over time based on the status of fish populations, it is difficult to provide management direction for this activity over the life of the plan (15-20 years). The continuation of existing management practices would prevail with respect to fishing in Lake Crescent. This includes maintaining a minimum size limit of 20 inches for the Beardslee and Crescenti trout. Beginning with the 1994 season, the minimum size limit for both fish was increased from 12 to 20 inches based on their size at maturity. The objectives of this new minimum size limit are to allow a greater proportion of fish to spawn at least once, with a goal of increasing the number of spawners.

3. *Comment:* What is the status of fish stocks in Lake Crescent?

Response: Good information on historic population sizes is lacking, but the Beardslee (rainbow trout) appear to be below levels that existed in the 1940s. There is no historic information regarding the Crescenti (cutthroat trout), but the population that spawns in Barnes Creek appears to be stable. The status of kokanee salmon and the Lyre River Crescenti is unknown but monitoring of these two populations has been initiated.

4. *Comment:* Would catch-and-release regulations benefit the Beardslee trout population? Also, fish at the Lyre River need protection and consideration.

Response: Catch-and-release regulations should result in a larger population and additional spawners and would be implemented if the population begins to exhibit a decline. Park staff are now monitoring each of the trout populations. Limiting factors may exist at other life stages such as juvenile rearing or prior to maturity when the diet shifts primarily to fish.

Lyre River fish would receive additional protection in 1998 if the Washington Department of Fish and Wildlife restricts bait and requires the release of wild fish as proposed by the park. A large debris slide occurred on Boundary Creek which impacted the spawning and rearing area of Crescenti utilizing the Lyre River.

5. *Comment:* Why hasn't hybridization occurred in the Beardslee trout? Can it be proven that they haven't hybridized? Will the park conduct more research on this fish, particularly with respect to spawning areas/time?

Response: The National Park Service will not know for sure if hybridization has occurred in the Beardslee until the completion of an on-going genetic study. If hybridization has not occurred, it is probably due to separation in time and location from the Crescenti. Spawn timing and location for the Beardslee is fairly well documented.

6. *Comment:* What documentation exists to support the following statement that appears on page 45 of the draft plan, "Lake Crescent has traditionally contained three endemic species: Beardsley trout, Crescent trout, and Lake Crescent whitefish"?

Response: This paragraph has been modified to include the five species of fish which are native to the lake and include: rainbow trout or Beardslee, cutthroat trout or Crescenti, kokanee salmon, prickly sculpin, and pygmy whitefish.

7. *Comment:* The park should develop a plan to eliminate exotic fish in Lake Crescent.

Response: There are no known exotic species of fish in the lake, but nonnative trout and kokanee were planted in the past and may have hybridized with native stocks. A genetic assessment of the trout is occurring and will examine this question.

COMMENTS AND RESPONSES

8. *Comment:* The draft plan should mention kokanee and identify spawning areas.

Response: Kokanee have been added to the list of fish in the "Affected Environment" section of the plan. The location of kokanee spawning areas is not well known but a survey is occurring this year to describe and document the timing and location of kokanee spawning areas.

9. *Comment:* There needs to be an assessment of motorized watercraft and the use of shoreline areas on spawning habitat, as well as an assessment of the food web and potential limitations on fish stocks.

Response: Park staff are surveying the lake's shoreline and have concerns about alterations to the riparian and shallow, nearshore habitat. The most significant impacts appear to be due to shoreline development although watercraft may have some impacts to specific kokanee spawning sites. Food web studies would be desirable but are very complex and costly. Lacking more definitive information regarding primary and secondary productivity in the lake, care needs to be exercised to protect water quality, shoreline and tributary habitat.

10. *Comment:* The plan needs to better analyze the effects of boating and PWCs on endemic fish species.

Response: See response # 9. Note that based on the findings presented in Appendix A of the final plan, the continued use of PWCs on Lake Crescent has been deemed an inappropriate use of the lake and will no longer be permitted.

Wildlife

1. *Comment:* There needs to be an assessment of motor vehicle noise on wildlife.

Response: Such an assessment would be difficult, expensive and not useful to the management of the lake at this time. As the principal highway link between the east and west sides of the Olympic Peninsula, there are no plans to change or regulate the levels of motor vehicle use on U.S. 101. However, the National Park Service is attempting to address the issue of highway noise by restricting the use of unmuffled compression brakes within the park. Signs will be posted along the highway to alert motorists of the restrictions.

Geology/Soils

1. *Comment:* The statement on page 59 of the draft plan which mentions that widening of the Spruce Railroad trail "would have a pronounced effect on geologic and soil resources" is overstated.

Response: To make the trail wide enough to allow for foot, horse, bicycle and wheelchair travel and to mitigate the risk of rockfall and slides, park staff believe that cutting into the existing slope would be necessary in several locations. Existing slopes, which have stabilized substantially since the railroad was constructed, would be disturbed anew, resulting in a pronounced effect on geologic and soil resources.

Vegetation

1. *Comment:* What measures will be taken to protect the three rare aquatic plants identified in the plan? What possibilities exist to increase their range and population size?

Response: It is NPS policy and the intent of this plan to minimize resource impacts resulting from visitor use, including impacts to rare aquatic plants in the Bovee's Meadow area. If visitor use is found to have an adverse impact on these rare plants, efforts to reduce or eliminate such impacts would be taken. The park superintendent has the authority to restrict visitor use in the area to protect sensitive resources. The National Park Service has no plans at present to augment the range and population size of these rare plants beyond managing visitor use in the area to minimize impacts.

2. *Comment:* Are there plans to minimize damage resulting from creation of new campsites along the Spruce Railroad trail?

Response: Construction of walk-in campsites along the Spruce Railroad trail is no longer included in the NPS proposed action (Alternative A); it is only contained in Alternative C. Under Alternative C, camping would not be permitted except in designated campsites where necessary and appropriate facilities would be provided such as firepits (if fires are permitted), tent pads, and portable toilets. With careful planning, site preparation and construction, vegetation impacts can be limited with minimal effects on surroundings.

3. *Comment:* Has any analysis been done on the effects of personal watercraft on shallow water plants? Also, shoreline recreation needs to be located away from areas of rare plants.

Response: There has been no such analysis done at Olympic National Park. However, because PWCs are very maneuverable, can operate well in very shallow water (less than 12") and can be launched from practically any site that has reasonable access to the water, these activities can have detrimental impacts on shoreline vegetation. Researchers at Everglades National Park have documented that PWC use has damaged emergent vegetation as well as shallow grass and mud flats used by feeding shorebirds. It is NPS policy and the intent of this plan to minimize resource impacts resulting from visitor use, including impacts to rare aquatic plants in the Bovee's Meadow area.

4. *Comment:* The logging paragraph on page 43 is difficult to understand; it is unclear and contains contradictory statements. Is it true that 4.3 billion board feet of timber were removed from the watershed between 1953 and 1957? This value seems incorrect.

Response: The volume figure provided on page 43 of the draft plan is incorrect. In his book, *Olympic Battleground*, Carsten Lien estimates that a total of 100 million board feet of timber were removed from the entire park between 1941 and 1958. The text has been revised to state that Olympic National Park records from 1953 to 1957 indicate that approximately seven million board feet of timber were removed from the township (T30N R9W) containing the Lake Crescent watershed.

COMMENTS AND RESPONSES

5. *Comment:* Can anything be done to reverse or halt the process of root rot in hemlock trees?

Response: Root rot is a naturally occurring element in the park's forests and plays a necessary role in the life cycle of trees. Interference with the process of root rot would be counter to NPS policies for managing natural resources, therefore, the park has no plans to control it.

Water Resources

1. *Comment:* What is the proposed management for water resources within the entire watershed, and not just the Lake Crescent area?

Response: The *Lake Crescent Management Plan/EIS* provides guidance for the development and use of the Lake Crescent area over the next 15 to 20 years. Park-related use and development is concentrated in six general areas around the lake: Fairholm, Barnes Point, Log Cabin, La Poel, East Beach, and the North Shore. The remainder of the watershed receives relatively little use due to steep terrain and limited access. Furthermore, the southern portion of the watershed is managed uniformly as designated wilderness. Consequently, the plan focuses on management of uses occurring on and around the lake. The continuation of the existing management direction would prevail for the greater watershed.

2. *Comment:* What water quality studies have been done at Lake Crescent? Have studies been done to determine pollution sources?

Response: This information is presented in the "Affected Environment" section of the plan under the heading "Water Resources".

3. *Comment:* The draft plan does not provide evidence to support the statement that some septic systems are failing (see page 41). What documentation does the National Park Service have that this is true? Does a monitoring program currently exist for septic systems?

Response: The draft plan does not state that septic systems are failing, only that they are a *potential* source of water pollution. The sentence has been revised in the final plan to improve clarity. A monitoring program currently does not exist for septic systems.

4. *Comment:* Why doesn't the park have three permits to operate septic systems at Log Cabin Resort, Barnes Cove, and Fairholm?

Response: The Washington State Department of Ecology requires discharge permits for both Lake Crescent Lodge and Log Cabin Resort (no permit is required for Fairholm since that septic system isn't linked to the treatment plant system; therefore it does not have to meet state requirements). Currently the National Park Service has a temporary permit for Log Cabin; a permit has been applied for in the case of Lake Crescent Lodge.

5. *Comment:* Water in the Lyre River has not been clean since the park put in the septic system at Log Cabin. If new facilities are installed, make sure they work.

Response: Park staff is unaware of a water quality issue involving the Lyre River. However, the National Park Service remains committed to protecting the pristine water quality and related values found throughout the Lake Crescent watershed.

Air Quality

1. *Comment:* Has there been any analysis of wood smoke in the Lake Crescent area? Is it a problem, and if so, what solutions are proposed to deal with this issue?

Response: In 1985 an automatic camera took daily photographs at the lake to monitor visibility, but no analysis of the data has been performed. No other studies of air quality in general, or wood smoke in particular, have occurred at Lake Crescent. Occasional accumulations of wood smoke at Fairholm campground have been observed but not formally documented.

2. *Comment:* What is the source and extent of air pollution on plant tissue in higher elevations (see page 39 of the draft plan)? Has this issue been studied in the Lake Crescent area, and if not, why? If there are impacts, when does the National Park Service plan to address these impacts?

Response: A 1986 study in the Heart o' the Hills area showed significant uptake by lichens of lead, nickel, and other metallic elements present in motor vehicle exhaust. Closer to Port Angeles, higher levels of sulphur, potassium, zinc and boron were noted. Motor vehicles and industrial development in Port Angeles are the likely sources of these pollutants, but further study is required before this can be confirmed.

3. *Comment:* There needs to be an assessment of motorized boat impacts on air (and water) quality.

Response: The National Park Service agrees that there is a lack of factual information regarding air quality in the Lake Crescent airshed. Although good information is unavailable, sources of potential air pollution do exist in the area. Further study is warranted to preclude or mitigate such potential pollution.

Previous water resource studies indicate that the water quality of Lake Crescent is exceptional. As noted in the plan (refer to the subheading "Water Quality" under the "Affected Environment" section), the Washington State Department of Ecology uses Lake Crescent as a reference lake in its ongoing study of freshwater lakes in Washington, due to its pristine water quality. An assessment of the impacts of motorized boats on water quality would be expensive and not useful to the management of the lake at this time.

CULTURAL AND HISTORIC RESOURCES

1. *Comment:* The plan does not explain how information on cultural resources, once it is documented, will be used to help in the selection of the preferred alternative.

COMMENTS AND RESPONSES

Response: The cultural resource information will be used to determine what if any impacts a particular alternative might have on cultural resources. If there will be an impact, mitigation of the impact either through changing project design or through data recovery will be planned.

2. *Comment:* The analysis provides no documentation or footnotes pertaining to Native American presence; it offers only opinions. The plan misrepresents the facts about prehistory. Change statements that read "very likely" to "it is possible".

Response: Currently accepted models of Native American land use practices, combined with the fact that the National Park Service continues to find prehistoric archeological sites in a wide variety of settings, such as Lake Ozette and in the subalpine zone, lend strong support to the argument that Native Americans used the shores of Lake Crescent. It is likely that the major reason the park has not documented similar sites around Lake Crescent is because very little systematic survey and testing has been completed.

It is the professional belief of the park's cultural resource management staff that the National Park Service must be prepared to find prehistoric archeological sites around Lake Crescent. This belief is based on: the park's archeological overview and research design (Schalk 1988); the fact that historic tribal sites are located on the Lyre River and Indian Creek; numerous prehistoric sites are located in the high country south of Lake Crescent; there are ethnographic references to Mount Storm King; the park has completed only limited amounts of archeological survey work near the lake; and, there are good travel routes to Lake Crescent from several directions. Nearly identical sets of corroborating evidence have been used to successfully predict the location of prehistoric archeological sites elsewhere in the park.

3. *Comment:* What documentation exists on past archeological digs in the Lake Crescent area? Will there be additional archeological investigations as a result of this plan?

Response: Documentation of archeological sites has been made in written reports as part of project compliance activities conducted around the lake. No archeological investigations are planned at present.

4. *Comment:* Change the wording in the paragraph about Lake Crescent prehistory (see page 46 of the draft plan) to indicate that the probability of finding artifacts is not high.

Response: See response # 2.

5. *Comment:* Historical and cultural items need more emphasis in the plan (e.g., historic artists, writers, poets, world's shortest railroad, former resorts, ferry landings, fish hatchery). Also, was there a cooperative community at the lake?

Response: The contributions of these people, places, and events are recognized in the park's *Historic Resources Study* (NPS 1983), *Administrative History* (NPS 1992) and *Historic Structures Report* (NPS 1984c, 1986). As specific parts of the plan are considered for implementation, the areas related to these contributions will be further surveyed for all cultural resources.

There was no cooperative at the lake that was similar to the cooperative community that founded Port Angeles.

6. *Comment:* The plan needs to better explain the cultural history of the area, including the contributions of various ethnic groups (e.g., Danish, French, Japanese, Chinese, Korean); it also should be offered in several languages.

Response: The cultural history of the lake has been addressed in the park's *Historic Resources Study* (NPS 1983). There is a high cost for translating such documents into other languages. At present, the National Park Service is not aware of the level of demand for these languages. Perhaps a one-page brochure on the cultural history of Lake Crescent could be prepared and translated into several languages.

7. *Comment:* Early pioneers (e.g., Mike Schmitt, Chris Morgenroth, Joseph Johnston, Fred Overly, Major Vollmer) need to be acknowledged in the draft plan, including their original efforts to establish the park.

Response: See response # 5.

8. *Comment:* How will the specifics of the Civilian Conservation Corps (CCC) contributions (e.g., roads, trails, campgrounds, picnic areas, lookouts, shelters) be related to the management area as a whole?

Response: The CCC contributions are recognized in the park's *Historic Resources Study* (NPS 1983) and *Historic Structures Report* (NPS 1984c, 1986). Most CCC development work at the lake was concentrated at La Poel; unfortunately much of this development is gone. All that remains at present is some of the rock work and paths. As specific parts of the plan are considered for implementation, these areas will be further surveyed for all cultural resources. As CCC developments and remains are found they will be evaluated, protected and interpreted as appropriate.

9. *Comment:* Explain what is meant by the statement, "...compliance may be necessary" (see page 62 of the draft plan, last sentence under the heading "Historic Structure Impacts").

Response: This statement refers to compliance with Section 106 of the Nation Historic Preservation Act. Because Storm King Ranger Station is a historic property, any actions that might affect the historic interior must be reviewed by the State Historic Preservation Officer.

LAND-BASED RECREATION AND TRANSPORTATION

U.S. 101

1. *Comment:* Will the National Park Service be doing improvements to U.S. 101? Would that be a cheaper alternative in the long run than upgrading the Spruce Railroad grade?

Response: The National Park Service is not proposing improvements to U.S. 101 as part of this planning effort. Based on a cost analysis recently prepared by the Washington State Department of Transportation, improving the highway to accommodate bicycles would not be cheaper than upgrading the Spruce Railroad grade. The consensus between the Department of Transportation and National Park Service is that upgrading the Spruce Railroad trail is the best alternative for accommodating bicycle use; cost was only part of the consideration.

COMMENTS AND RESPONSES

2. *Comment:* Is it the National Park Service's objective to remove all bikes from U.S. 101? How do you propose to protect bikes from logging trucks? The National Park Service should consider creating an adequate bike lane on U.S. 101 to avoid the need for bike access along the Spruce Railroad grade.

Response: In the interest of safety, the National Park Service would like to see bicycle traffic removed from U.S. 101. As a short-term solution to help make the highway safer for bicycles, the Washington State Department of Transportation is looking at installing a warning light system that could be triggered by cyclists to alert motorists when they are on the road. Over the long term, establishing a multiple use trail along the Spruce Railroad grade would eliminate the need for cyclists to travel along the narrow, windy portion of U.S. 101 bordering Lake Crescent.

3. *Comment:* Why change U.S. 101 to a "parkway"? Will this designation change how it is managed? It is recommended that the National Park Service re-explore the lake bypass route (west of Lake Crescent) to remove logging trucks/commercial traffic from U.S. 101.

Response: The National Park Service would like to erect entrance signs at the park boundaries along U.S. 101 to improve the sense of entry into the park for motorists and park visitors traveling along the highway. Altering traffic patterns and creating a bypass to reroute commercial traffic away from the highway is beyond the scope of this planning process.

4. *Comment:* Does the National Park Service want to reroute U.S. 101 traffic onto U.S. 112? The National Park Service needs to clarify its position.

Response: The National Park Service has no plans to reroute U.S. 101 traffic onto U.S. 112.

Fairholm

5. *Comment:* Why are there no electrical hook-ups for recreational vehicles at the Fairholm campground? Without hookups you get generator noise which impacts the peace and quiet of the area.

Response: The lack of electrical hook-ups at the Fairholm campground is consistent with the level of services offered at other campgrounds within the park. Electrical hook-ups are available at commercial campgrounds in the immediate vicinity such as the Shadow Mountain General Store along U.S. 101, the Sol Duc Resort and the Log Cabin Resort.

6. *Comment:* Why does the National Park Service want to move the walk-in campsites at Fairholm campground? People will still want to go down to the lakeshore and hang out at those sites on beach blankets.

Response: The National Park Service is not proposing to completely eliminate all walk-in sites at the Fairholm campground; rather, only campsites along the lakeshore would be removed. This action would be taken to alleviate resource damage (e.g., soil compaction, vegetation trampling, barren ground) that has occurred at these sites due to heavy visitor use.

7. *Comment:* Rather than providing walk-in campsites along the Spruce Railroad trail, the National Park Service should consider expanding the Fairholm campground instead.

Response: Construction of walk-in campsites along the Spruce Railroad trail is no longer included in the NPS proposed action (Alternative A); it is only contained in Alternative C. The National Park Service has no plans to expand the Fairholm campground.

8. *Comment:* Gasoline for motor vehicles should be sold at the Fairholm store.

Response: Since gasoline for motor vehicles is already available locally in the Lake Crescent area at the Shadow Mountain General Store and in nearby Port Angeles, the National Park Service does not plan to offer this service at the Fairholm store.

Barnes Point

9. *Comment:* There is concern that the plan calls for increased use at Bovee's Meadow, which is already too developed and crowded. Proposed development at Bovee's Meadow will cause additional impact; existing development has caused the current degradation. The National Park Service should disperse use and access to other areas.

Response: As part of this planning effort, a detailed site plan would be developed to help enhance visitor opportunities in the Barnes Point area (including Bovee's Meadow) while protecting the natural and cultural resources of the area. Detailed site planning for each management area (Fairholm, Barnes Point, Log Cabin, La Poel, East Beach, and the North Shore) also would help ensure dispersed recreational use around the lake.

10. *Comment:* By moving picnic tables into Bovee's Meadow, the National Park Service will make the vegetation impacts worse by disturbing a new site while people continue to use the lakeshore area. This would double the area of impact. Bovee's Meadow should be closed to picnicking and allowed to revegetate.

Response: Picnicking is a popular activity at Bovee's Meadow and one that the National Park Service would like to see continue. Because the picnic area would be relocated to a previously disturbed site, there would be no further vegetation impacts. Removal of the picnic tables scattered along the shoreline would discourage littering and decrease impacts to shoreline habitat.

11. *Comment:* The National Park Service is encouraging too much use at Bovee's Meadow and is trashing the site, resulting in trespassing on private property.

Response: See response # 9.

The National Park Service is unaware that trespassing on private property is a significant problem. However, if this is true, park staff would post signs in the area to prevent trespassing on private lands.

COMMENTS AND RESPONSES

12. *Comment:* The National Park Service should close Bovee's Meadow to parking and investigate the northeast part of Barnes Point as a day-use site to protect the spawning area, sensitive plants, and mature forests. The northeast corner was clear-cut fairly recently.

Response: There are no plans to eliminate the existing parking area at Bovee's Meadow since parking in the area is already limited. The detailed site plan to be developed for the Barnes Point area will look at ways of enhancing visitor use and resource protection at Bovee's Meadow including minimizing impacts on spawning habitat, rare aquatic plants, and the surrounding forest.

13. *Comment:* There should be a buoyed swimming area at Bovee's Meadow to improve safety. Also consider establishing a designated beaching area for boats in Bovee's Meadow and moving the boat launch from the Barnes Point historic area.

Response: The National Park Service believes that the existing buoyed no-wake zone, which begins approximately 30 yards offshore, together with the proposed ban on PWC use will adequately address water safety issues in the Bovee's Meadow area.

The National Park Service has no plans to move the existing Storm King boat launch. With the exception of Alternative D, boaters would continue to have access to the shoreline to beach their boats in addition to using existing docks.

14. *Comment:* Social trails at Barnes Creek should be closed and allowed to revegetate.

Response: The National Park Service acknowledges that social trails are a problem in the Barnes Creek area. As part of this planning effort, a trail plan would be developed for the Barnes Point area that would identify existing and proposed trails, provide connections between various locations, minimize potential pedestrian/vehicular conflicts, and prevent the proliferation of social trails that damage natural vegetation and cause stream channel erosion. In areas of high foot traffic, clearly marked paths would help prevent further damage to vegetation and protect spawning beds in Barnes Creek. As a result, some social trails would be closed and allowed to revegetate.

15. *Comment:* Enlarging the Lake Crescent Lodge for a multi-purpose center would result in negative impacts to vegetation (e.g., clear-cutting). Also, the Kennedy's stayed in the building that the National Park Service is considering replacing.

Response: Construction of a multi-use facility at Lake Crescent Lodge is not included in the NPS proposed action (Alternative A); it is only contained in Alternative C.

16. *Comment:* Does full occupancy at the Lake Crescent Lodge in only July and August justify destroying resources to increase lodge capacity?

Response: It is anticipated that expansion of the Lake Crescent Lodge would occur primarily on a previously disturbed site. Note that the proposed action has been modified to state that within the scope of existing or future concession contracts, the National Park Service may investigate the feasibility of increasing the number of units (rooms) at the Lake Crescent Lodge by a maximum of 10 percent (a total of six units).

17. *Comment:* Increases at Lake Crescent Lodge (and Log Cabin Resort) should be 50-75%, not restricted to 10%.

Response: Comment noted; see response # 16.

18. *Comment:* Is there a need for a second boat dock at Storm King? It seems inconsistent with less use of watercraft on the lake, which seems to be the tone of the plan.

Response: Under the NPS proposed action (Alternative A), there are no plans to construct a second boat dock at Storm King. Construction of a second boat dock at the existing boat ramp is only proposed in Alternatives C and E.

19. *Comment:* Does the plan look at changes to make the Storm King boat ramp more accessible? Also, more parking is needed at Storm King for boats and trailers.

Response: As part of the site design for the Barnes Point area, the National Park Service would look at changes to make the Storm King boat ramp more accessible, along with increasing the amount of boat trailer parking in the area.

Log Cabin

20. *Comment:* Why eliminate spaces for recreational vehicles (RVs) at Log Cabin? Several RV users go to that site for 2-3 weeks per year and you would be excluding them.

Response: Resource impacts associated with visitor use of the RV campground area are apparent and include soil erosion and loss of wildlife habitat within the riparian zone of Log Cabin Creek and along the lakeshore. The National Park Service does not plan to eliminate all RV camping from the Log Cabin area, only those sites bordering the creek where resource degradation is a problem (approximately 8-10 sites would be eliminated; the actual number would be determined during the site design process). Despite a reduction in RV sites, RV camping would still be available locally at Log Cabin and the Fairholm campground within the park, and at the Shadow Mountain General Store along U.S. 101.

21. *Comment:* People enjoy using the RV site. Yes, there is a problem with congestion, but the RV site should be enlarged, not eliminated.

Response: The National Park Service has no plans to either enlarge or eliminate the RV camping area at Log Cabin; see response # 20.

22. *Comment:* If impacts on the creek and spawning habitat are the problem, why not pull the RV area away from the creek or fence off the spawning area to protect it?

Response: See response # 20.

COMMENTS AND RESPONSES

23. *Comment:* Structures should not be removed from the shoreline; it would degrade the public's enjoyment of the site.

Response: The National Park Service is mandated to protect park resources and provide for visitor use. However, in cases where conflict exists between resource protection and visitor use, resource protection must come first. Such is the situation along the shoreline at Log Cabin Resort.

24. *Comment:* Why change from RV's to cabins? Where did the idea for cabins come from? RV's are more cost-effective; with cabins there would still be stream impacts. The National Park Service should do more to educate visitors about stream impacts.

Response: The RV area would be redesigned to allow for the construction of cabins to help the concessioner recoup some of the revenue lost by the removal of campsites along Log Cabin Creek. New cabins would be sited away from the creek. The creek would be restored with native vegetation and access would be delineated with established paths and footbridges across the creek. The National Park Service would continue to educate visitors to help minimize resource impacts resulting from visitor use in the area.

25. *Comment:* The document needs to assess the impacts of the proposed parking area at the Log Cabin Resort.

Response: Since the plan does not provide detailed site designs for any given management area, but instead proposes a general direction for visitor development and resource protection throughout the watershed, a general analysis of environmental impacts is provided. Consequently, before implementing some actions, further environmental analysis may be necessary. In each case, compliance with all laws, regulations, and policies would be carried out before any action is undertaken. As a detailed site design is developed for the Log Cabin area, further environmental analysis would be completed, including a more in-depth analysis of the proposed parking area.

26. *Comment:* Additional parking at Log Cabin would help overflow parking on holiday weekends.

Response: Construction of additional parking at Log Cabin is included in the NPS proposed action (Alternative A), as well as Alternatives C and E. The park anticipates increased use of Log Cabin after redevelopment, with a greater need for parking. The site design process would be used to select a site for additional parking to support lodging and day-use facilities.

27. *Comment:* Instead of increasing the number of campsites (public access), the plan is decreasing it (both at Log Cabin and Fairholm). The National Park Service should be planning for increased numbers of visitors rather than going in the other direction.

Response: As part of the NPS proposed action (Alternative A), the park would investigate the feasibility of establishing tent camping sites at the west end of La Poel to help offset any losses in campsites at Fairholm and Log Cabin. The east end of La Poel would remain a day-use area.

La Poel

28. *Comment:* The sewage problem at La Poel needs to be corrected.

Response: The National Park Service does not believe that there is a significant sewage problem at La Poel. Although the portable toilets at this location are pumped out on a regular basis, they sometimes experience odor problems as a result of heavy use during the summer months.

29. *Comment:* Another option for watercraft use is to locate it at La Poel.

Response: The National Park Service has no plans to create additional boating facilities at La Poel. As part of the NPS proposed action (Alternative A), the Fairholm and Log Cabin docks would be reconstructed and boat fuel would be offered at both these locations. Furthermore, boaters would continue to have access to the shoreline to beach their boats in addition to using existing docks around the lake.

30. *Comment:* The closure of La Poel and East Beach will concentrate visitor use into fewer locations creating more problems in these areas. Spreading out visitor use would be better.

Response: There are no plans to close either La Poel or East Beach under the NPS proposed action (Alternative A); only Alternative D proposes to limit the use of both these areas.

East Beach

31. *Comment:* The East Beach Road needs to be improved; it is narrow, with poor fog lines and potholes. It is also unsafe for the combination of traffic using it (e.g., RVs, cyclists, hikers).

Response: The National Park Service agrees that maintenance is needed along the East Beach Road. However, because this is a county road, Clallam County is the agency responsible for performing all road maintenance. Occasionally, the National Park Service would perform minor maintenance along the East Beach Road in the interest of safety.

32. *Comment:* Does the plan intend to place parking above East Beach (e.g., at the Fischer property)? That way all of East Beach could remain a beach.

Response: As a short-term solution to better protect the shoreline, parking would be redesigned and moved away from the beach; handicapped parking would be specifically designated.

Over the long term, the park would explore the feasibility of constructing additional parking uphill from East Beach, with a trail providing access to the beach. Spaces in the lower lot would be reserved for handicapped parking only. Any spaces in excess of those needed for handicapped parking would be eliminated and converted for day use (e.g., additional picnic tables).

33. *Comment:* What is meant by “an upper parking area” at East Beach?

Response: See response # 32.

COMMENTS AND RESPONSES

North Shore

34. *Comment:* What kinds of improvements are planned for the Camp David Jr. Road? Could the National Park Service contact local landowners before planning any changes to the road? Also, camping needs to be regulated along this road.

Response: Because the Camp David Jr. Road (North Shore Road) is a county road, Clallam County is the agency responsible for performing all road improvements. Occasionally, the National Park Service would perform minor maintenance along the Camp David Jr. Road in the interest of safety. Under the NPS proposed action (Alternative A), there is to be no designated camping along the road including the North Shore picnic area and Spruce Railroad trail. Lake Crescent rangers regularly patrol the road to ensure the "no camping" regulation is enforced.

35. *Comment:* Who owns the right-of-way along the Spruce Railroad trail?

Response: Most of the right-of-way is owned by the National Park Service; a small portion is in private ownership.

36. *Comment:* The document needs to clarify that horses are allowed on the Spruce Railroad trail.

Response: The text of the document has been modified to incorporate the suggested change.

37. *Comment:* The document needs to clarify how the Spruce Railroad trail and campsites would be constructed. Also, who will be responsible for maintaining the trail and protecting local landowners from fire hazards?

Response: Since publication of the draft plan, the addition of walk-in campsites along the Spruce Railroad trail has been deleted from the NPS proposed action (Alternative A). The National Park Service would be responsible for maintaining the multi-purpose Spruce Railroad trail and would follow WSDOT recommendations regarding trail construction. Fire is a concern throughout all of the Lake Crescent watershed and the park would continue to work with landowners and educate visitors to prevent human-caused fires.

38. *Comment:* When you open the Spruce Railroad trail to more people, there will be a need for more sanitation facilities and road access to maintain them. Will portable toilets be located along the trail?

Response: As part of the NPS proposed action (Alternative A), accessible toilets (vault or composting) would be constructed at the east and west trailheads in anticipation of increased use of the Spruce Railroad trail.

39. *Comment:* Is the Rails-to-Trails Conservancy interested or involved with the Spruce Railroad trail project?

Response: An extensive planning effort was undertaken by the Washington State Department of Transportation, in cooperation with the National Park Service, to assess safe alternatives for nonmotorized

travel along the length of Lake Crescent. The Rails-to-Trails Conservancy has not been involved in the Spruce Railroad trail project.

40. *Comment:* How can the National Park Service create a bike freeway through a World Heritage Park?

Response: The plan does not propose to create a bike “freeway” along the Spruce Railroad trail. Multi-use trails of the type proposed are consistent with both national park and world heritage site designations.

WATER-BASED RECREATION

1. *Comment:* Twenty years ago, snowmobiles were in their infancy in Yellowstone National Park. Twenty years from now, what will be the level of personal watercraft (PWC) use on Lake Crescent? An analysis of their impact along with future projections of use should be included in the plan.

Response: PWC use on Lake Crescent has been determined to pose a potential threat to park resources and values and adversely affects the experience of other park visitors, particularly those seeking a resource-based experience dependent on a national park setting (see Appendix A). Therefore, the continued use of PWCs on Lake Crescent is deemed an inappropriate use of the lake and will no longer be permitted.

2. *Comment:* The plan assumes that Lake Crescent is over-populated and over-used. Are there data that indicate that use has increased or that the lake is heavily used?

Response: Statements regarding use of the lake are based primarily on observations by NPS personnel, visitation and occupancy records for concession operations, and occupancy levels at Fairholm campground. The document has been revised to delete the reference to “heavily used”; however, the National Park Service believes that use at Lake Crescent is increasing based on the above information sources. There are no data to indicate that fewer boats use the lake today than did 25 to 35 years ago. The Park Service also anticipates increased use of the lake in the near future. Documentation used to support this statement has been added in the final plan (see Appendix B).

3. *Comment:* All of the following actions have been suggested for inclusion in the preferred alternative: limit the number of motorized boats; establish a boat permit system; impose restrictions on beaching boats along the shoreline; limit boat speed and horsepower; ban the use of all motorized craft; ban personal watercraft only; impose timing restrictions on the use of motorized versus non-motorized craft; impose age restrictions and training requirements on the use of personal watercraft; treat all watercraft equally and impose no limits on boat type, speed, horsepower, noise, or beaching areas; instead, publish and post guidelines, improve educational efforts, and enforce existing regulations.

Response: The National Park Service has considered all of the above suggestions regarding water recreation on Lake Crescent. The following items have been included in the NPS proposed action (Alternative A):

Allow motorboats (excluding personal watercraft) to operate on the lake. Motorized boats (excluding personal watercraft) would continue to operate on the lake. A 100-yard no-wake zone

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would be established from the shoreline, with a 300-yard no-wake zone adjacent to public use areas, the two historic districts, and habitat-sensitive areas.

Retain shoreline access for boats. Boaters would continue to have access to the shoreline to beach their boats in addition to using existing docks.

Establish a 40-mile per hour (mph) speed limit for motorized watercraft. The maximum speed limit for motorized watercraft would be 40 mph, lakewide. This speed was determined a safe and reasonable limit for all types of boating recreation. National Park Service watercraft would be excluded from this restriction in order to carry out law enforcement and rescue activities.

4. *Comment:* Does the National Park Service plan to eliminate watercraft from Lake Crescent like they did snowmobiles from Hurricane Ridge?

Response: As stated under the NPS proposed action (Alternative A), motorized boats (excluding personal watercraft) would continue to operate on the lake. The National Park Service has no plans to ban all motorized watercraft from Lake Crescent, now or in the future.

5. *Comment:* Why should any user group be forced to go somewhere else to recreate?

Response: Olympic National Park has numerous mandates to protect its valuable resources and to provide for their enjoyment in ways that do not degrade those resources. Where conflict exists between visitor use and resource protection, protection of the resource must come first. The park cannot be all things to all people; all uses cannot be accommodated.

As an example, PWC use on Lake Crescent has been determined to pose a potential threat to park resources and values and adversely affects the experience of other park visitors, particularly those seeking a resource-based experience dependent on a national park setting (see Appendix A). Therefore, the continued use of PWCs on Lake Crescent is deemed an inappropriate use of the lake and will no longer be permitted.

6. *Comment:* There is a concern that the plan won't reflect the majority of water users and that restrictions would prevent recreational use.

Response: The many letters received on the draft document commenting on intrusions on the visitor experience and concerns about visitor safety, particularly with regard to PWC use, and the need for regulations or limitations on noise, speed, and location of watercraft operation are an indication that user conflicts do exist. Although information on use and user conflicts may be limited, it is the intent of the National Park Service to initiate a proactive management strategy to avoid or minimize user conflicts now and in the future. In the absence of any limitations on use of the lake, the potential for user conflicts and decreased safety will likely increase as recreational use of the lake increases.

See also response # 5.

7. *Comment:* The plan needs to provide a definition of PWC.

Response: Personal watercraft are defined as vessels which use an inboard motor powering a water jet pump as its primary source of power and which are designed to be operated by a person sitting, standing or kneeling on the vessel, rather than the conventional manner of sitting or standing inside the vessel. This definition has been included in the final plan (see Appendix A and glossary).

8. *Comment:* If PWCs or powerboats are restricted or eliminated from Lake Crescent, how will rescues be accomplished in a timely manner?

Response: As stated under the NPS proposed action (Alternative A), motorized boats (excluding personal watercraft) would continue to operate on the lake. The ban on PWC use would have no effect on the National Park Service's ability to accomplish rescues in a timely manner.

9. *Comment:* Olympic National Park has created a greater problem by introducing a mandatory fee on PWC operators launching from Log Cabin. This has caused use to be concentrated at the Barnes Point/Lake Crescent Lodge area.

Response: The launch fee at Log Cabin is imposed by the concessioner and not the National Park Service. The concessioner is allowed to charge this fee based on the provisions of the concession contract under which he operates.

10. *Comment:* A lack of law enforcement is the problem on Lake Crescent. If the reason is due to a lack of money, then charge user fees for boat ramps, docks, etc., and make sure the money goes directly to enforcement. If the park cannot afford to enforce the laws, it should rescind its power to do so and give the lake back to the state.

Response: The park has no plans to charge fees for the use of boat ramps, docks, or any other facilities on the lake. However, as suggested by the Friends of Lake Crescent, the National Park Service would investigate the use of a citizens' auxiliary to assist in patrolling the lake.

11. *Comment:* There are many other users on the lake besides PWC users. Since PWCs do affect many users, a compromise is needed that recognizes the needs of quiet recreation and PWCs. Zoning is suggested as one such compromise between PWCs and other user groups.

Response: Due to the proposed ban on PWCs (see Appendix A), the idea of zoning the lake for this type of use has been deleted from the NPS proposed action (Alternative A).

12. *Comment:* There needs to be a suggestion from non-motorized watercraft operators regarding what they feel is a "safe" zone for operating together.

Response: See response # 11.

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13. *Comment:* Zoning limits the safety of other boaters; no zoning would allow all boaters to adjust to wind and weather conditions. Zoning could also cause safety concerns due to the congestion and concentration of boats.

Response: See response # 11.

14. *Comment:* There is concern about the proposed options for personal watercraft. If the National Park Service does implement zoning for PWCs, they should be zoned away from property owners.

Response: See response # 11.

15. *Comment:* The proposed limits on PWCs through zoning are not enforceable; page 18 of the draft plan says there are no additional staff or funds available.

Response: See response # 11.

16. *Comment:* Will zoning affect a landowner's ability to launch a PWC from their property if they live outside the personal watercraft zone?

Response: See response # 11.

17. *Comment:* There is concern about the feasibility of maintaining zoning on the lake. How does the National Park Service currently enforce zoning of motorized use on the lake? How will we delineate 100- and 300-yard no-wake zones and how will boaters distinguish between these zones? Is staffing adequate to enforce these zones? Is this the most efficient use of limited park staff? Is this the highest priority for limited funding? Do we want to spend money on punitive actions versus spending money on more constructive actions (e.g., banning jet skis)? This is not a good solution to the problem if it can't be carried out. It is more important to spend time and money on resource protection and education of park users and landowners.

Response: Boating regulations are enforced by Lake Crescent rangers who patrol the lake regularly. It is the boat operator's responsibility to know the rules and regulations of the waterways on which he operates. The boat operator is expected to use his best judgement when distinguishing between the 100- and 300-yard no-wake zones. As mentioned in response # 10 above, the National Park Service would investigate the use of a citizens' auxiliary to assist in patrolling the lake.

18. *Comment:* How will water skiers be able to do a beach start if there is a 100-yard no-wake zone?

Response: Water skiers would still be able to do a beach start under the NPS proposed action (Alternative A). Outbound, skiers would be permitted to travel 90 degrees from the shoreline to the no-wake zone; on return, boats would be able to drop skiers off along the shoreline while remaining outside the no-wake zone.

19. *Comment:* What happened to the no-wake signs that were present at Log Cabin and other launch sites? They should be put back up.

Response: No-wake buoys currently exist at various locations around the lake including Log Cabin, Fairholm, Bovee's Meadow, the Storm King boat launch, the swimming area at East Beach, and the mouth of the Lyre River.

20. *Comment:* Clarify why there is a 25-horsepower limit on motorboats. Such a limit is inadequate to pull large individuals when water skiing. The limit on boat motors should be 100 horsepower.

Response: Under the NPS proposed action (Alternative A), there are no proposed limits on the horsepower of motorboat engines. Limits on horsepower are only proposed under Alternative D.

21. *Comment:* How will the government determine the horsepower of boat engines?

Response: Lake Crescent rangers would enforce the horsepower limits proposed under Alternative D through boat patrols and spot checks at launch sites during periods of peak use. Boat operators violating the horsepower limits would be asked to remove their boats from the lake. See also response # 20.

22. *Comment:* Does the National Park Service have documentation to support the proposed speed limit on motorboats? It is recommended that a speed limit only be imposed a certain distance from shore. In addition, ban motors in excess of 500 horsepower.

Response: Under the NPS proposed action (Alternative A), there are no horsepower limits proposed for motorboats. However, a 40-mile per hour (mph) speed limit would be established lakewide for motorized watercraft (a 35 mph limit would be established under Alternative D). Both speeds are considered a safe and reasonable limit for all types of boating recreation. National Park Service watercraft would be excluded from this restriction in order to carry out law enforcement and rescue activities.

23. *Comment:* How can the National Park Service establish a speed limit on Lake Crescent when most PWCs don't have a speedometer?

Response: See response # 1.

24. *Comment:* The National Park Service needs to address the issue of noise. This issue doesn't pertain only to PWCs, but includes all motorboats. Existing rules are inadequate for controlling noise levels. Because of the proximity of U.S. 101, we do not need to exacerbate this problem with PWCs. The National Park Service should focus on decibel limits, not speed limits and should encourage the PWC industry to develop quieter machines.

Response: Noise regulations already exist for watercraft and can be found in Section 3.7 of the *Code of Federal Regulations*. On Lake Crescent, motorboats cannot exceed a noise level of 82 decibels at a distance of 82 feet (25 meters) from the vessel. This regulation is enforced through spot checks of watercraft by NPS rangers. Operators of watercraft that violate this regulation are asked to remove their boats from the lake.

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25. *Comment:* Does research exist on decibel levels for various uses and the need for associated regulations?

Response: The National Park Service is unaware that such research currently exists. The majority of PWCs on Lake Crescent meet the noise abatement standard contained in Section 3.7 of the CFR (see response # 24). However, many of the visitor complaints and comment letters received about PWC use on Lake Crescent concern the high pitch and erratic sounds generated by these watercraft as they rapidly accelerate and decelerate their engines and the cumulative noise they produce when operated in groups. Consequently, although PWCs may meet the regulatory noise standard, noise from these types of watercraft are an intrusion on other visitors and the serenity of the park environment.

26. *Comment:* Is the problem with PWCs audio pollution, water control, wave erosion? Is there evidence of resource damage caused by PWCs?

Response: See response # 1. An administrative record providing the basis for the proposed ban on PWC use is provided in Appendix A.

27. *Comment:* Clarify that PWCs are now made with separate oil and gas tanks, and not mixed fuel, so although a gasoline spill does cause some environmental harm, it is not as damaging as an oil spill. PWCs do not need to be filled with oil during a day of use.

Response: Nearly all of the PWCs currently in use are powered by two-stroke engines that lose roughly 30% of their unburned fuel and oil mixture directly into the water. Although the PWC industry has begun phasing out two-stroke units, it will be many years before all of these units are replaced.

In 1991, the U.S. Environmental Protection Agency (EPA) conducted a study that examined emissions from two-stroke engines. Based on results of this study, the EPA determined that two-stroke engines emit high levels of hydrocarbons. The EPA has since implemented standards to address the impacts resulting from these emissions. The rule went into effect in 1996, but the standards are not required to begin until the model year 1998 for outboard engines, and in 1999 for personal watercraft (Tahoe Regional Planning Agency 1997).

28. *Comment:* Why aren't existing regulations enforced for PWC and all boats?

Response: Boating regulations are enforced for all types of watercraft by Lake Crescent rangers who patrol the lake regularly. As mentioned in response # 10 above, the National Park Service would investigate the use of a citizens' auxiliary to assist in patrolling the lake.

29. *Comment:* Banning jet skis is not the answer. There is less use on the lake now than in the past. If park rangers can't enforce the existing regulations and you put more regulations in place, how can you expect to enforce the additional regulations?

Response: See response # 1 and # 28.

30. *Comment:* There is concern that if jet skis are banned, motorboats will be banned later. Banning jet skis is just the start.

Response: See response # 4.

31. *Comment:* Lake Crescent was in private ownership before Olympic National Park was established. Any restriction or banning of PWC use by lake property owners represents a taking of landowner rights and landowners deserve to be compensated by the park.

Response: Lake Crescent was included in the Olympic Forest Reserve, established in 1897, and came under U.S. Forest Service administration with the establishment of that agency in 1905. Lake Crescent was included in the boundaries of Olympic National Park at the time of its establishment in 1938. The *United States Code* gives the National Park Service authority to regulate boating activities within areas of the National Park System. Because Lake Crescent is part of Olympic National Park and under federal ownership, banning PWC use on the lake does not represent a taking of private property rights.

32. *Comment:* How will jet ski use on Lake Crescent affect lakes in North Cascades National Park?

Response: The proposed ban on PWC use applies only to Lake Crescent in Olympic National Park.

33. *Comment:* There is concern about the displacement of jet skis into other areas. Restricting watercraft on Lake Crescent will horribly affect watercraft use on Lake Sutherland and other lakes in the area. The National Park Service should consider its neighbors and the associated impact on the lake and nearby landowners.

Response: The National Park Service acknowledges that a ban on PWC use on Lake Crescent could result in increased use of PWCs on lakes in the surrounding area.

34. *Comment:* Lake Ozette already offers wilderness recreational opportunities. This area is available for those who want to experience solitude and wilderness. Lake Crescent is traditionally a recreational lake. There is concern that a ban on PWCs is only the first step towards elimination of all boats from Lake Crescent.

Response: See response # 4.

35. *Comment:* The National Park Service should promote activities that are consistent with the NPS mission. The use of jet skis is inappropriate in national parks and should be unconditionally banned. PWCs disrupt many uses that are consistent with NPS objectives and negatively affect many park users. PWC use on Lake Crescent sets a bad precedent for the National Park Service.

Response: Based on the findings presented in Appendix A of the final plan, the continued use of PWCs on Lake Crescent has been deemed an inappropriate use of the lake and will no longer be permitted.

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36. *Comment:* The National Park Service needs to consider what has been learned in other national parks where jet skis or snowmobiles are allowed. The National Park Service needs a consistent, servicewide policy on the use of PWCs in national parks.

Response: The National Park Service plans to develop a consistent, servicewide policy on PWC use in the near future. The public will have an opportunity to comment on this new policy following its publication in the *Federal Register*.

37. *Comment:* Why are beaching areas and lakeshore campsites a problem when the lake level fluctuates about 8 feet and there are frequently big waves on the lake? Areas available for beaching boats should be open for beaching.

Response: Although natural processes such as wave action and seasonal rise in water levels are factors in lakeshore erosion, visitor use has also contributed to the loss of shoreline vegetation and soil erosion. Whereas it is not the intent of the National Park Service to manipulate natural processes, it is NPS policy and the intent of this plan to minimize impacts from visitor use. Note that under the NPS proposed action (Alternative A), boaters would continue to have access to the shoreline to beach their boats in addition to using existing docks.

38. *Comment:* The National Park Service should consider building a boat dock at Lake Crescent Lodge.

Response: Since publication of the draft plan, the NPS proposed action (Alternative A) has been revised to state that the dock in front of the Lake Crescent Lodge would either be repaired or replaced, affording visitors a greater opportunity to enjoy the lakeshore as well as to safely access the lodge area from their boats.

39. *Comment:* Does the National Park Service know how many PWC users on Lake Crescent are tourists versus local area residents? Is there a way to find out?

Response: Information on visitor use patterns and trends on Lake Crescent is limited and is based primarily on observations by NPS personnel, visitation and occupancy records for concession operations, and occupancy levels at Fairholm campground. The National Park Service cannot say definitively how many PWC users on Lake Crescent are from outside the area versus local residents. PWC operators appear to be primarily lake residents or from local communities, and are often repeat users of Lake Crescent. Visitors at large have not yet begun to appear with PWCs.

40. *Comment:* Clarify the effect that a PWC ban on Lake Crescent would have on the local economy if PWC users were forced to recreate elsewhere.

Response: The National Park Service does not believe that a PWC ban on Lake Crescent would result in a significant impact on the local economy. Since most PWC operators are from the local area, it is anticipated that they would continue to use their PWCs on lakes and waterways of the Olympic Peninsula.

41. *Comment:* Clarify the park's jurisdiction and authority over Lake Crescent versus the state's jurisdiction. Who owns, regulates, and has jurisdiction over the water?

Response: Lake Crescent, which is part of Olympic National Park, is under federal ownership. The National Park Service has jurisdiction over the lake, not the state.

42. *Comment:* Lake Crescent water is used for drinking purposes; boats do not impact water quality.

Response: The National Park Service is committed to protecting the pristine water quality and related values found throughout the Lake Crescent watershed. These values are to be protected through NPS management efforts and will be guided by direction set forth in this plan.

43. *Comment:* If the National Park Service is concerned about water quality, why did we mandate removal of the only fueling station on Lake Crescent?

Response: Currently boat fuel is available for purchase at Fairholm. Under the NPS proposed action (Alternative A), an above-ground fuel tank would be installed at Fairholm and Log Cabin to provide boat fueling stations at both the east and west ends of the lake. Also see response # 42.

LANDOWNER CONCERNS

1. *Comment:* There is a concern among landowners that if the National Park Service gates the road at Ovington, the park will not have enough incentive to maintain the remaining road beyond the gate for adequate landowner access. Landowners oppose the gate on the North Shore Road since it would cause a bottleneck and potentially prohibit access to private property and interfere with emergency vehicle access if a vehicle was parked in front of the gate.

Response: Since publication of the draft plan, the proposal to gate the North Shore Road past the picnic area has been removed from the NPS proposed action (Alternative A).

2. *Comment:* Section 5 of the park's enabling legislation isn't mentioned in the plan. Why is it not there? What is the park doing to ensure compliance with Section 5? How are landowners' rights (e.g., access, egress, water uses) addressed in the plan?

Response: Language from Section 5 now appears in the final plan under the heading "Planning Context: Legislative Mandates" in the "Purpose of and Need for the Plan" section of the document. The park is managed consistent with all applicable laws, regulations, and policies including Section 5 of the park's enabling legislation.

3. *Comment:* With regard to Section 5, is the park prepared to compensate property owners for any rights lost?

Response: Authority to regulate NPS areas is an enumerated power under the property clause of the U.S. Constitution. Because Lake Crescent is part of Olympic National Park and proposed management actions

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would occur on federal land, implementation of this plan does not represent a loss of private property rights.

4. *Comment:* How will landowners be compensated for lost property values?

Response: The National Park Service does not anticipate a loss of property values as a result of the plan's implementation. There has never been a devaluation of property values since the establishment of Olympic National Park. This trend is expected to continue.

5. *Comment:* The quote appearing on page 2 of the draft plan is not from the park's enabling legislation.

Response: The National Park Service acknowledges that this quotation should have been attributed to committee report 2247. This error has been corrected. The quote now appears under the subheading "Park Purpose" in the final plan.

6. *Comment:* How much money does the National Park Service have for land acquisition? Does the National Park Service have a ceiling amount for property purchases?

Response: The amount of money available for land acquisition varies from year to year and is subject to Congressional appropriation. There is no ceiling amount for individual property purchases; each purchase is handled on a case-by-case basis.

7. *Comment:* Can people who own land sell it?

Response: Yes; landowners can sell their land to whomever they choose.

8. *Comment:* What is the park's policy on extending leases when they expire? Does the National Park Service still offer lifetime leases?

Response: The National Park Service will not extend leases that expire. Lifetime leases are offered on a case-by-case basis.

9. *Comment:* If I deed my property to my daughter, could she deal with the park and get fair market value and lifetime occupancy?

Response: Situations such as those described are handled on a case-by-case basis. The National Park Service is not required to offer lifetime leases.

10. *Comment:* Does the National Park Service have an extended offer to buy private property when it becomes available?

Response: The National Park Service is always willing to consider purchasing private property in the Lake Crescent area as it becomes available, provided there is money present for land acquisition. The National Park Service would inform the landowner that it was interested in purchasing their property.

11. *Comment:* Private property should be purchased on a continual basis when available and all property owners should be notified in writing that the park is willing to buy their property. Also, it should be possible for landowners to donate property.

Response: See response # 10. In accordance with current Department of the Interior policy, in the absence of incompatible threats, land acquisition will only be done when a willing seller, willing buyer situation exists. The National Park Service would welcome donations of private property in the Lake Crescent area.

12. *Comment:* The National Park Service should send out a letter saying that it is interested in buying private property as it becomes available.

Response: See response # 10.

13. *Comment:* Eventually will the park buy out all landowners?

Response: The National Park Service does not foresee this happening.

14. *Comment:* When is Schott's place going to be dealt with? When is Schott's lease up on the larger place?

Response: The National Park Service has already acquired the Schott's property. There is no lifetime lease on the larger property.

15. *Comment:* The resistance expressed is not against the contents of the plan, but rather over the fear that there will be other restrictions placed on landowners. There is concern that proposed actions will involve an incremental whittling away of opportunities for the public and private landowners. There is also concern that the National Park Service will take over private property.

Response: The National Park Service acknowledges your concerns but believes they are unwarranted. The purpose of this plan is to provide overall management guidance for the Lake Crescent area for the next 15 to 20 years. Actions proposed in the plan will help enhance the visitor experience in the Lake Crescent area while protecting park resources. The National Park Service has no intention of acquiring private property except from willing sellers.

16. *Comment:* Does a reseeding program exist for properties that have been restored to natural conditions and properties previously logged and not reseeded?

Response: No such program exists due to a lack of funds. Restoration of previously disturbed lands is done on a case-by-case basis, as funding is available.

17. *Comment:* The National Park Service needs to establish standards and provide educational tools to landowners such as suggestions for the use of environmentally friendly products (e.g., lawn fertilizers, laundry detergent) to help protect the lake's water quality.

Response: Although no formal program exists, the National Park Service is willing to work with landowners that require such assistance.

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18. *Comment:* Describe the relationship of zoning within the park under federal rules versus zoning and land use planning in Clallam County pursuant to the Growth Management Act.

Response: Since Olympic National Park has exclusive jurisdiction within its authorized boundary, it is not subject to state or county laws, regulations, or planning processes, including the Growth Management Act. The park's *Master Plan*, published in 1976, establishes the relationship between the park and adjacent land zoning. Management zoning within the park is explained in the park's *Statement for Management*, published in 1996. Both documents are available for review at park headquarters.

19. *Comment:* Are landowners required to have county or state permits for water?

Response: Landowners are required to have county permits for both water and septic systems.

20. *Comment:* How does the park determine what is a buildable/unbuildable lot?

Response: A buildable lot is one that can meet both septic and drinking water requirements; an unbuildable lot is one that cannot.

GENERAL CONCERNS

1. *Comment:* There is a perception that the first plan (*Water Safety Plan*) got dumped. Why is there a duplicate plan? What drove the need for an additional plan and what is its benefit? Where in this plan did the other plan information go?

Response: The *Lake Crescent Management Plan/EIS* provides overall management guidance for resource protection and visitor use of the Lake Crescent area for the next 15 to 20 years. In contrast, the park's *Water Safety Plan* (NPS 1994) serves as an operational guide for all watercraft on Lake Crescent. Management proposals in the *Lake Crescent Management Plan* that involve watercraft use are either consistent with or would amend the *Water Safety Plan*.

2. *Comment:* The final EIS needs greater analysis of ecosystem-wide (versus lake) issues (e.g., fire policy, trails plan, viewshed preservation, boundary review/adjacent landowner cooperative agreements).

Response: Park-related use and development is concentrated in six general areas around the lake: Fairholm, Barnes Point, Log Cabin, La Poel, East Beach, and the North Shore. The remainder of the watershed receives relatively little use due to steep terrain and limited access. Furthermore, the southern portion of the watershed is managed uniformly as designated wilderness. Consequently, the plan focuses on management of uses occurring on and around the lake. The continuation of the existing management direction would prevail for the greater watershed.

Because the plan does not provide detailed site designs for any given management area, but instead proposes a general direction for visitor development and resource protection throughout the watershed, a general analysis of environmental impacts is provided. Consequently, before implementing some actions, further environmental analysis may be necessary. In each case, compliance with all laws, regulations, and policies would be carried out before any action is undertaken.

3. *Comment:* What is the time frame for implementing the plan and how much money exists for plan implementation? Where will these funds come from?

Response: The *Lake Crescent Management Plan/EIS* provides guidance for the management of Lake Crescent over the next 15 to 20 years. Available funding would ultimately determine when proposed actions would be implemented. Because of dwindling federal funds, the National Park Service is interested in establishing partnerships with the public and private sector to develop cost-effective solutions for the plan's implementation. The purpose of this planning effort is to determine the types of management actions necessary to enhance resource protection and the visitor experience in the Lake Crescent area, while leaving funding options open.

4. *Comment:* The National Park Service doesn't have the economic resources to maintain what it has now. How will it maintain the facilities proposed in this plan?

Response: See response # 3.

5. *Comment:* There is concern about proposing anything requiring maintenance or enforcement activities since there will not be funds to follow through.

Response: See response # 3.

6. *Comment:* Does the plan establish priorities for implementing different actions since the National Park Service lacks funding to implement all sections of the plan at once?

Response: Yes; a section which outlines priorities for implementing proposed actions has been added to the final plan and appears in the "Alternatives, Including the Proposed Action" section of the document under the heading "Actions Common to All NPS-Action Alternatives".

7. *Comment:* What are the effects of increased use in developed areas (i.e., effects on ambiance and environmental effects)?

Response: Recreational activities and experiences that depend on unspoiled natural conditions, a quiet ambiance and low volumes of visitation would not be enhanced by increased visitor use in developed areas, and in many cases, would be diminished.

See also response # 9 (below).

8. *Comment:* Most of the plan invites higher visitor use and development. There is concern about a lack of fire suppression and enforcement of regulations including no camping restrictions in non-designated areas. With more people the park will need more police and fire protection. How will that be paid for?

Response: See response # 3. Fire is a concern throughout all of the Lake Crescent watershed and the park would continue to work with landowners and educate visitors to prevent human-caused fires. As suggested by the Friends of Lake Crescent, the National Park Service would investigate the use of a citizens' auxiliary to assist in patrolling the lake.

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9. *Comment:* The park is not doing enough to care for some heavily used beach areas. Garbage clean-up is needed as well as rest areas. A particular area of concern is the pullout between East Beach and Log Cabin.

Response: Park staff recognizes these operational concerns and is doing everything it can to address them within existing staff and budgetary constraints. Visitors can help alleviate litter problems by using trash receptacles when available and packing out what they pack in.

10. *Comment:* The park needs better input from local people. Water use on Lake Crescent occurs 65 days/year. A citizens' advisory board should be the first people the National Park Service consults with because these individuals use the park the most as opposed to out-of-town visitors who use the park only 65 days per year.

Response: Regulations for implementing the procedural provisions of the National Environmental Policy Act (40 CFR 1503.1) state that an agency shall "request comments from the public, affirmatively soliciting comments from those persons or organizations who may be interested or affected." Since Lake Crescent is part of Olympic National Park, which is nationally significant, management actions are a concern for a much wider audience than just the local area. The concerns of all interested parties must be considered equally.

11. *Comment:* Discriminating policies should be time distance discounted to provide equity in policy decisions with dramatic local impacts. Decisions should be locally based.

Response: See response # 10.

12. *Comment:* Is there a procedure for recognizing different user groups (with an emphasis on visitors from outside the area)?

Response: No, the National Park Service does not distinguish between park users nor display preferential treatment among user groups. The superintendent is mandated by law to protect park resources. Where conflict exists between visitor use and resource protection, protection of the resource must come first. The park cannot be all things to all people; all uses cannot be accommodated.

13. *Comment:* What is meant by the term "visual theme"? Before the National Park Service puts out a final plan, all landowners should have the opportunity to comment on a visual theme. There is concern that private homes may not fit into the park's visual theme.

Response: There is no NPS standard that addresses consistency of architectural style within a national park setting. NPS management policies (NPS 1988) provide general guidelines in decisions regarding historic structures. In addition, the park's *Visual Themes Manual* (NPS 1989b) offers a set of general and specific guidelines for developing designs and maintenance procedures for park facilities. With respect to Lake Crescent, the *Visual Themes Manual* identifies a design theme that is consistent with the natural setting and historic character of the Lake Crescent area. This design theme applies only to park facilities, not to private structures.

14. *Comment:* Interpretive exhibits should include nature sound interpretation and listening skills.

Response: The National Park Service will consider this suggestion when designing future interpretive exhibits in the Lake Crescent area.

15. *Comment:* What provisions are being made to ensure handicapped accessibility of recreation facilities?

Response: All new facilities would be handicapped accessible and comply fully with the requirements of the Americans with Disabilities Act.

16. *Comment:* How are we gauging "heavy use"? What are we basing it against?

Response: Statements regarding use of the lake are based primarily on observations by National Park Service personnel, visitation and occupancy records for concession operations, and occupancy levels at Fairholm campground. The document has been revised to delete the reference to "heavily used"; however, the National Park Service believes that use at Lake Crescent is increasing based on the above information sources. There are no data to indicate that fewer boats use the lake today than did 25 to 35 years ago. The Park Service also anticipates increased use of the lake in the near future. Documentation used to support this statement has been added to the final plan (see Appendix B).

17. *Comment:* When the park acquired Lake Crescent, was it a recreational or wilderness lake?

Response: Lake Crescent was originally included in the Olympic Forest Reserve, established in 1897, and came under U.S. Forest Service administration with the establishment of that agency in 1905. Management of Lake Crescent was transferred to the National Park Service in 1938 when it was included within the boundaries of the newly created Olympic National Park. To this day, Lake Crescent remains a recreational lake.

18. *Comment:* The plan does not acknowledge that this is a national park to be preserved unimpaired; not a recreation park, or a local government park. The plan does not adequately stress conservation needs.

Response: The superintendent is mandated by law to protect park resources. Where conflict exists between visitor use and resource protection, protection of the resource must come first. The park cannot be all things to all people; all uses cannot be accommodated.

19. *Comment:* How were local governments and individuals included in the planning process, as required by the National Environmental Policy Act? There is an absence of Clallam County input.

Response: As required by the regulations for implementing the procedural provisions of the National Environmental Policy Act (40 CFR 1501.7), the National Park Service has invited the participation of affected federal, state, and local agencies, Native American tribes, and other interested persons as part of the scoping process for this planning effort. The agency has also solicited comments from the public, including those persons or organizations who may be interested or affected. A detailed history of public involvement for the *Lake Crescent Management Plan/EIS* appears in the "Consultation and Coordination" section of the final plan.

COMMENTS AND RESPONSES

20. *Comment:* What effect do management policies proposed in this plan for Lake Crescent have on surrounding lakes?

Response: Management policies proposed in this plan apply specifically to Lake Crescent and not to surrounding lakes.

21. *Comment:* How does the status of the park as a biosphere reserve and world heritage site affect management of the park and why is this not mentioned in the plan? How does the plan relate to buffer areas addressed in biosphere reserve status?

Response: Olympic National Park was designated an international biosphere reserve in 1976, and a world heritage site in 1981. These honors are mentioned in the final plan under the subheading "Park Significance" in the "Purpose of and Need for the Plan" section of the document. They are also explained in the park's *Statement for Management*. Neither designation changes the ownership or affects management of the park.

Regarding the biosphere reserve concept of "buffer areas", there are no "buffer areas" either proposed or established for the Olympic National Park and Biosphere Reserve. The authorized park boundary is also the boundary of the biosphere reserve.

22. *Comment:* What determines a Wilderness Area designation? Would the plan affect wilderness designation?

Response: Wilderness areas are designated by Congress. The plan would have no effect on wilderness designation. The southern portion of the watershed (south of U.S. 101) is managed uniformly as wilderness, proscribing many uses and improvements. The immediate area around Lake Crescent does not lie within designated wilderness and the plan does not propose to manage it as such. The lake would continue to be managed for a diversity of recreational uses that are compatible with the preservation of park resources and the serenity of the lake environment.

23. *Comment:* There is concern that the workshop format does not allow names to be connected to a specific comment. Commenters should be allowed to go on the record with their name.

Response: Regulations for implementing the procedural provisions of the National Environmental Policy Act (40 CFR 1503.4) state that "an agency preparing a final environmental impact statement shall assess and consider comments both individually and collectively...stating its response in the final statement." There is no requirement to match specific comments with individuals.

24. *Comment:* Olympic Park Institute (OPI) keeps a low profile. Landowners at Lake Crescent haven't been given much information about OPI. Landowners should be on OPI's mailing list for course information.

Response: Landowners desiring OPI course information should contact this organization directly regarding their request.

25. *Comment:* Landowners at Lake Crescent are a valuable part of the history of the lake. They should be recognized as an asset and should be more prominent in the document.

Response: The National Park Service acknowledges the important role that landowners play in the Lake Crescent area. Proposed actions demonstrate a respect for private property rights and are consistent with Section 5 of the park's enabling legislation.

26. *Comment:* The National Park Service has not addressed sanitation around the lake. The National Park Service needs to address visitor comfort and ensure adequate facilities for sewage and litter.

Response: Sanitation needs around Lake Crescent have been addressed in both the draft and final plans. Under the NPS proposed action (Alternative A) new, accessible restroom facilities are planned for Bovee's Meadow, East Beach, the North Shore picnic area and both ends of the Spruce Railroad trail.

See also response # 9.

27. *Comment:* What does overuse of the vault toilets mean—not serviced enough? What is the reason for and solution to this problem?

Response: In areas that receive intense visitor use during the summer season, restroom facilities are heavily used and can become a health hazard and detract from the visitor experience. East Beach receives particularly heavy use during the summer and the existing restroom is inadequate to handle this level of use. To remedy the problem, a new vault or composting toilet(s) would be installed as part of the NPS proposed action (Alternative A).

28. *Comment:* The plan calls for improvements to businesses. Are these improvements planned in such a way that it won't put businesses out of business? Can businesses receive grants or some form of aid from the National Park Service to complete the improvements?

Response: Proposed improvements apply only to park concessions which are operated under contract with the National Park Service. These improvements can be made either by the National Park Service or the concessioner. The responsible party would be determined through mutual agreement. The National Park Service is committed to maintaining productive partnerships with each of its concessioners.

29. *Comment:* Shadow Mountain should be used as a visitor information station instead of building a new one.

Response: The proposed visitor information/orientation facility would be located on government property since the National Park Service has no control over land uses on private property such as the site mentioned.

COMMENTS AND RESPONSES

30. *Comment:* The National Park Service should establish a visitor information radio station specific to Lake Crescent.

Response: Such a radio station already exists in the Lake Crescent area and can be found at 1610 am on the radio dial. This message is updated regularly and includes visitor information on interpretive programs, safety, campgrounds, and concessions in the Lake Crescent area.

31. *Comment:* The National Park Service should consider expanding the visitor season into the shoulder seasons (fall/spring).

Response: The National Park Service acknowledges that in recent years visitor use has expanded into the fall and spring. The National Park Service is willing, within budgetary constraints, to expand its services to meet demand. The National Park Service would also continue to encourage concessioners to respond to the increased demand for visitor services during the shoulder seasons.

32. *Comment:* Changes at Sol Duc Hot Springs will increase impacts on the lake. Use at Sol Duc has not been considered in the plan.

Response: The National Park Service does not believe that visitor use at Sol Duc will result in increased impacts at Lake Crescent. The Sol Duc area is not considered in this plan since it lies outside the Lake Crescent watershed.

33. *Comment:* Define the term mass-wasting (see page 41 of the draft plan, last sentence under the heading "Geology and Soils").

Response: "Mass-wasting" refers to slope failures. The text of the document has been revised to clarify this point.

34. *Comment:* Legislation should be introduced to make Lake Crescent a national recreation area.

Response: The National Park Service has no plans to pursue legislation that would designate Lake Crescent as a national recreation area.

35. *Comment:* There needs to be an ongoing review by a variety of constituents (perhaps establish a steering committee) rather than taking a brush-fire approach. There also needs to be a lead agency in this initiative; Olympic National Park would be appropriate in this role.

Response: The National Park Service has no plans to establish a steering committee to guide future management actions in the Lake Crescent area. Instead, the Park Service would continue to inform and solicit input from agencies, organizations, and individuals regarding the plan's implementation.

RESPONSES TO COMMENTS SUBMITTED BY AGENCIES AND ORGANIZATIONS

The following is a list of government agencies and organizations that provided written comment on the *Draft Lake Crescent Management Plan/EIS*. A copy of each of these letters is reproduced in this document, with substantive comments noted in brackets and sequentially numbered. The agency's responses are located in a separate section immediately following the letters and are numbered to correspond with the bracketed comments.

LOCAL, STATE, AND FEDERAL AGENCIES

Board of Commissioners, San Juan County, Washington
City of Forks, Washington
Clallam County Parks, Fair and Building Maintenance Department
Spokane City/County Department of Emergency Services
U.S. Environmental Protection Agency
Washington State Interagency Committee for Outdoor Recreation
Washington State Office of Archeology and Historic Preservation

ORGANIZATIONS

| | |
|---|--|
| Cape George Hiking Group | North Cascades Conservation Council |
| Cascade Conservation League | Northwest Ecosystem Alliance |
| <i>Central Sierra Environmental Resource Center</i> | Olympic Park Associates |
| Chequamegon Audubon Society | Olympic Park Institute |
| Friends of Lake Crescent | Rivers Council of Washington |
| Friends of the Earth | Sierra Club (Cascade Chapter) |
| Hells Canyon Preservation Council | Southern Willamette Earth First! |
| Inland Northwest Wildlife Council | Tahoma Audubon Society |
| International Jet Sports Boating Association | The Izaak Walton League of America (Florida Keys Chapter) |
| Klahhane Club | The Mountaineers |
| Mount Rainier National Park Associates | The Seattle Garden Club |
| National Marine Manufacturers Association | The Wilderness Society |
| National Parks and Conservation Association, Pacific Northwest Regional Office | Washington Kayak Club |
| Nisqually Delta Association | Washington Wilderness Coalition |



Board of Commissioners

San Juan County

350 Court Street #1, Friday Harbor, Washington, 98250 • 360/378-2898

Darcie L. Nielsen, Dist. 1 • John B. Evans, Dist. 2 • Rhea Y. Miller, Dist. 3

669

January 31, 1997

Dave Morris
Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

RECEIVED
MAILROOM
97 FEB -6 AM 10:46
OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

Dear Mr. Morris:

I support the ban of personal watercraft (PWC) on Lake Crescent. I also encourage you to restrict personal watercraft on all other waterways of Olympic National Park in a manner no less restrictive than at the Monterey Bay Marine Sanctuary. They have allowed a very small area of operation of PWC's 1/2 to one nautical mile offshore with strict guidelines. Any park managed primarily for natural, cultural and wilderness resource protection must be very careful not to become vulnerable to the potential damage caused by the operation of thrill-craft such as PWC's within its boundaries.

The waters of San Juan County have been nominated for the placement of a marine sanctuary. We are already in a difficult struggle with the PWC industry as we simply try to protect the unique marine resources of this area. We have had considerable citizen testimony regarding the problems with these machines in our area, and in other pristine areas worldwide.

Thank you for your consideration.

Sincerely,

Rhea Y. Miller
Commissioner, District 3

187



POST OFFICE BOX 1998 • FORKS, WASHINGTON 98331-1998

500 EAST DIVISION (360) 374-5412 FAX: (360) 374-9430

1 November 1996

David Morris
Superintendent,
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362-6798

RE: Response from the City regarding the proposed Lake Crescent Management Plan

Dear Superintendent Morris:

After a thorough review and a discussion with the City's staff, I would like to forward the following comments to be included in the review process of the Lake Crescent Management Plan. While I believe that this is a good start to an important planning project, it appears that some things need some further attention.

I. Areas Unclear

1 A. Concessions associated with the Fairholm Store are not detailed as to what is currently available. This makes it somewhat difficult to determine what additional concessions should be encouraged and developed for the visitor.

2 B. Personal Water Craft (PWC) is referred to many times in the document, but it is not defined. The words could cover anything from a floating air mattress to a jet ski to a small fishing dingy with a motor. It does appear from the usage of PWC that the plan is focusing on the jet-ski type of devices. If that is the case, the word should be defined by example through the use of "e.g."

3 C. There is the need for a brief summary description of all the potential historical sites within the Planning Area in a table form. This would make it easier to evaluate the impact of the plan upon such sites, as well as educate the reader to the long tradition of use associated with Lake Crescent.

4 D. Local governments involved in the preliminary draft included the Quileute Tribe, however, no invite was made

4 to the City of Forks. See pg. 85-6 of the Plan. Our economic livelihood depends upon SR 101, an integral part of the Lake Crescent Planning Area, and we feel that we should be involved in future aspects of this process. The same should hold true of Clallam County - also not listed in the above referenced pages.

II. Areas needing further attention, addition, and/or review.

A. SR 101

5 1. SR 101 should be designated as a separate Management Area for purposes of planning. The Plan notes that SR 101 is the topic of numerous other plans (Coastal Corridor and PRTPO to name two) and that those groups should be left with the planning of this vital transportation link. However, as staff has informed me, both of these organizations have determined that this is really a park planning area. Therefore, it appears that no one is planning the development, stabilisation or repair of the most vulnerable section of the lifelines of Western Clallam and Jefferson Counties. A separate management area should be established for SR 101 that looks specifically at infrastructure improvements, upgrades, and redesign configuration.

2. Further evaluation regarding the stability of SR 101 in the Gobin's (sp?) Hill area is required. In the past two years, one section of this area has developed a rather significant stream/spring. In addition, there appears to be a constant undermining of the bank by the drainage of stormwater which is shifting the paved surface away from the hill side. Repair of this problem appears to be limited to resurfacing over the tell-tale crack that appears. As a result additional weight is laid upon an already unstable surface. While the Park has received word from Federal Highway Engineers that the road is as stable as it could be, additional study and surveying needs to be done. In addition, efforts should be made to determine whether "soil nailing" could be utilized to anchor the road way. If nothing is done, it is our belief that the entire road way could sluff off the face of the hill within the next decade. If such an event was to occur, Forks and Clallam Bay-Seiku would be left in a very difficult situation.

6 3. SR 101 was built around Lake Crescent and driven on by President Roosevelt in his famous 1937 visit. However, it is interesting to note that this historic structure has not been added to, or even nominated for, the National Historic Register.

This oversight should be addressed immediately, and this management plan would be the appropriate place to do so.

B. Concessions.

Additional information and review should be conducted on the creation of concessions associated with kayak/rowing shells and horse-back operators.

1. Kayaks and rowing shells could be a very marketable concession that would have little impact upon the environment of Lake Crescent. Rental of such items is usually relatively inexpensive (\$5-15/hour) and would afford a new type of recreational activities to most incomes. In addition, such a concession would be similar to the historic boating on the Lake noted within the plan.
2. In the Summer, the weather conditions are such that the Lake could be used as a rowing practice area by local rowing teams or university crew teams. Appropriate facilities would be required for such activities, however, some consideration should be made for such an activity in this document.
3. With the development of the Spruce Railroad Trail, consideration should be given to the establishment of horse trails and horse-back operators. This was another traditional means of transportation around the Lake which may prove to be a profitable concession. In addition, certain trails could be delineated from Lake Crescent that could be used by both horse riders and non-motorized mountain bike operators.

C. Development.

The management objectives notes that additional properties should be purchased, when possible, and added to the Park. See Plan at 19, obj. 10. The following comments are directed specifically at this objective.

1. An inventory should be made of all privately owned lands bordering the Lake. This inventory should include a description of the property in its current state, date of construction, and whether any building would be considered historical upon purchase. In a situation where the Park purchased additional property, and said property would be historical under current Federal or State guidelines, the Park should have in place a means of assuring the continued use, preservation, and maintenance of said facility.

2. In addition, a development element should be created for each new activity that arises out of the proposed plan. The Park should consider future purchases as a means of distributing such developments (kayak, rowing, horse riding, etc.) to other locations thereby reducing impacts upon the five management areas identified within the proposed plan.

D. Interpretation

A well developed interpretative plan needs to be drafted for the entire Lake Crescent portion of ONP. This plan should incorporate both cultural and historical themes and provide insight into the wide historical spectrum associated with Lake Crescent. In addition to cultural, recreation and resource extraction themes, additional curiosities about the Lake environment, wildlife and geology should be displayed. Use of interpretative devices could include a repeating radio message, kiosks, walk through displays at park facilities, etc.

The City of Forks appreciates the opportunity to comment on the draft Lake Crescent Management Plan. We hope that the above comments are helpful and would like to receive additional materials associated with this planning effort as they are developed.

If there are any further questions, please do not hesitate to contact Rod Fleck or myself at the number above.

Sincerely,
Phil Arbeiter
Mayor

wrf/PA



CLALLAM COUNTY
PARKS, FAIR AND BUILDING
MAINTENANCE DEPARTMENT

88

CLALLAM COUNTY COURTHOUSE
223 EAST FOURTH STREET
PORT ANGELES, WASHINGTON 98362-3098
PARKS & BLDG. MAINT. 360-417-2291
FAIRGROUNDS 360-417-2551
FAX 360-417-2470

CRAIG JACOBS, DIRECTOR

December 6, 1996

Dave Morris, Superintendent
Olympic National Park
600 East Park Street
Port Angeles, WA 98362

Dear Mr. Morris:

The Clallam County Park Board and I appreciate the opportunity to respond to the EIS Lake Crescent Management Plan. We have an interest in the recreational use of the lake in general and in how your proposed changes may affect our users at Camp David Jr.

Page 27 Water Recreation "Alternative A"

Please consider different language and distances for the "no wake zones" for the following reasons:

1. All craft leave a wake at any speed; some leave a larger wake at slower speeds than they do on plane.
2. No wake zones would be a difficult item to enforce as it takes visual sight of a certain size wake which is gone within a couple minutes when it hits the shore.
3. Boaters traveling along the uncrowded shorelines during much of the year leave very little wake and will be prohibited from enjoying this closer in experience if the 100-yard and very excessive 300-yard zones are established. We feel these limits are excessive at this point and hurt the boating experience unnecessarily.
4. When the lake is rough in the middle, there are many areas that are sheltered, not crowded, and can be used to water ski or boat nearer the shorelines, but these will all be in your new restricted 100-yard and 300-yard "no wake zones". So, in essence, the plan as written will to a large extent prohibit water skiing unless the lake is calm. This would make it early morning or late evening only for most activities in the summer. This then forces competitive uses during these hours with fishermen which we feel is not necessary.

96 DEC -9 PM 1:46
RECEIVED
MAILROOM
OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

Our recommended changes to "Alternative A" under Water Recreation would be as follows:

1. Establish a 5 mph speed limit within 100 feet, not 100 yards, of the shoreline and 300 feet, not 300 yards, of any public dock, public swimming area, or public facility. (100 yards is the length of a football field from public facilities which is in fact a long way out on the lake).

For benefit of all users 300' would be marked with buoys around public areas although, practically speaking, buoys distract from the beauty of the lake, and you may not be able to keep buoys anchored in that deep of water.

Our recommendation for PWC's and their zones are as follows:

1. Change the zones to 100 feet and 300 feet and the "no wake zone" to a 5 mph zone as it is with boats.
2. Choose Option 3 with lake-wide access so as to not unfairly discriminate against this form of craft. If they create problems of safety or violate general boating rules, then write them citations. Some PWC operators are very considerate, follow rules of the water, and are very responsible. This option also keeps them spread out on the lake and does not concentrate them in front of a single group of residents or public facilities.

Our recommendation on the speed zone is that 50 mph is a good idea. We would even favor a lower overall speed limit, such as 40-45 (no lower than 40), as a trade off for closer in no wake or slow speed zones.

We definitely support boaters having access to the shoreline to beach their boats. This spreads out the use and is a very nice experience for boating recreation.

The use as we see it is heavy primarily on 10-12 weekends in July and August plus Memorial Day and Labor Day. The rest of the year is relatively uncrowded and a great experience.

Page 24 "Alternative A"

1. We feel there is a need for RV camping in Clallam County and would like to see some allowance made for RV camping at the east end of the lake at Log Cabin if at all possible.
2. This is even more of a concern if LaPoel is closed to overnight parking.
3. Improvements to the RV area at Log Cabin would be welcomed and probably help the concession fill these sites rather than eliminating them and adding permanent buildings.

Page 23 "Alternative A"

1. We understand why you want to move the waterfront sites away from the lake, however, we feel this will not solve the degradation of the sites as all campers

5

will then utilize this shoreline where you now only have those utilizing the sites using it.

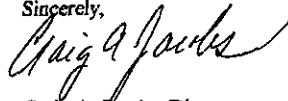
2. It is also a great camping experience in these sites the way they are.
3. Lake usage is primarily heavy Memorial Day weekend, then late June-Labor Day. It is a rather short peak season. Therefore, the shoreline has the other 9 non-peak months out of the year to revegetate.

Finally, we feel you have done a very good job of balancing recreation use and resource preservation throughout this plan.

We do hope you will consider reducing the no wake zone to 100 feet and 300 feet rather than yards. We also hope you will consider Option 3 for PCW's and keep some RV camping at the east end of the lake.

Thank you for the opportunity to respond. We are looking forward to seeing how you address our comments and the other comments you receive during the comment period.

Sincerely,



Craig A. Jacobs, Director
Clallam County Parks, Fair &
Building Maintenance Dept.

cc: Jim Rumpeltes, Clallam County Administrator
Martha Ireland, Clallam County Commissioner
Dorothy Duncan, Clallam County Commissioner
Phil Kitchel, Clallam County Commissioner
Garry Edwards, Manager, Camp David Jr.

Clallam County Park Board Members

| | | | |
|---------------|-------------|--------------|-----------|
| Gary Colley | Rick Cahill | Jane Hughes | |
| Lloyd Pearson | Bill Riedel | Les Sandison | Jack Waud |

86

Spokane City/County



Spokane County Court House

DEPARTMENT
OF
EMERGENCY SERVICES
WEST 1121 GARDNER
SPOKANE, WA 99201-2072
TELEPHONE: 456-2204



In my opinion, the increase in complaints are not specifically due to the PWC, but to the increase in the total vessel traffic and an increase of persons taking up residence on lakes and rivers. Complaints and violations have risen equally between the PWC and non PWC vessels. I do not feel that singling out one type of vessel is going to significantly reduce complaints, operation violations or accidents. Special interest groups on all sides have been struggling for domination for their own benefits. I feel that the waterways are for all to use and enjoy in a safe and prudent manner. A one hundred foot rule is common throughout most jurisdictions and as long as this distance is adopted and strictly and equally enforced, all users will enjoy our waterways. Educating all vessel operators is another factor which will significantly decrease the number of complaints received. It is amazing, on the number of contacts that I have made, that the operator has little or no knowledge of basic boating laws or requirements.

TO: Superintendent, Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362-6798

FROM: Deputy Tom Mattern
Spokane County Marine Enforcement
1121 West Gardner, Spokane, WA 99201

RE: EIS/Lake Crescent Management Plan

DATE: December 4, 1996

RECEIVED
MAILROOM
96 DEC 11 AM 11:38
OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

It has been brought to my attention that the National Park Service superintendent for Lake Crescent is considering adopting regulations which specifically address PWC usage. I have been a Marine Deputy for over ten years and have seen the rise of complaints, seen an increase in reckless operation, and a disregard for regulations governing vessel operations. As to this date, I have only investigated two accidents involving PWC operators. Both incidents were non fatal and one was a PWC operator at fault and the other was the other type vessel. Far more accidents occur in our waterways involving other than PWC vessels. The two major complaints that we receive are noise the other is violating no wake zones. PWC noise is primarily for several PWC's within a close proximity to each other. The PWC operators have a tendency to operate nearer shore than the other type vessels. Noise complaints from other type vessels are for no or modified systems. The violating of no wake zones is slightly higher amongst PWC operators. It has also been my observation that younger operators tend not to be as aware of their surroundings when operating a PWC.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

March 25, 1997

Reply To
Attn of: ECO-088

David K. Morris, Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

Re: National Park Service's Lake Crescent Management Plan
Draft Environmental Impact Statement (EIS), Clallam Co., WA

Dear Mr. Morris:

The U.S. Environmental Protection Agency (EPA) has received the Lake Crescent Management Plan draft EIS for review in accordance with our responsibilities under the National Environmental Policy Act and under Section 309 of the Clean Air Act.

The purpose of the proposed action is to develop a long-range management plan to effectively address the potential impacts resulting from increased volumes and intensity of use at Lake Crescent. The draft EIS evaluates three action alternatives and the no-action alternative.

EPA Region 10 has used a screening tool to conduct a limited review of the draft EIS. Based upon our screen, we do not foresee having any environmental objections with the preferred alternative. Therefore, we will not be conducting a detailed review of the draft EIS.

If you have any questions, please contact me in Seattle at 206/553-2143.

Sincerely,

Richard B. Parkin
Richard B. Parkin, Manager
Geographic Implementation Unit

OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL # of pages = 1

| | |
|-------------------------------|----------------------------|
| To <i>Linda Baker</i> | From <i>Andy Smith</i> |
| Dist./Agency <i>US EPA</i> | Phone # <i>220-4016</i> |
| Fax # | Fax # <i>4159</i> |

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204

STATE OF WASHINGTON
NOV 12 PM 2:44
INTERAGENCY COMMITTEE FOR OUTDOOR RECREATION
P.O. Box 10000, Olympic National Park, Washington 98504-0917 • (360) 902-3000 • FAX (360) 902-3026
PORT ANGELES, WA 98302

November 7, 1996

Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

Subject: Draft EIS, Lake Crescent Watershed

The Interagency Committee for Outdoor Recreation (IAC) is responsible for statewide comprehensive outdoor recreation planning processes under Land and Water Conservation Fund (LWCF) rules and state law (43.99 RCW). IAC's most recent statewide document is *Assessment and Policy Plan 1995-2001 (APP)*.

The APP found that *water access* is one of the top priorities for people pursuing outdoor recreation opportunities. Continued physical access to the Lake for a variety of boating uses is appropriate and seems to be adequately addressed in the draft EIS. IAC has no specific comments on the question of zoning for various motorized uses.

The APP also found significant demand for trail-based recreation, including hiking, walking, and bicycling. In focus group meetings held in Peninsula communities including Port Angeles, Aberdeen, and Hoquiam, we heard particular local interest in bicycle-related facilities. Often mentioned is the need for on-street routes.

With respect to bicycle use, IAC is aware that the Washington State Department of Transportation (WSDOT) is conducting a study of mobility options in the Lake Crescent area. The options, similar to those discussed in the EIS, appear to include improvements to the Spruce Railroad trail, improved shoulders on Highway 101, and improved shoulders on East Beach, Piedmont, and Lyre River roads.

Whether different bicycle options are "safer" than others is subjective and ultimately depends on the relative experience of the individual cyclist. Casual bicycle riders and younger riders without driving experience will often prefer a separated path, such as the Spruce Railroad. A separated path will sometimes become a "destination" site, where people wish to simply stay on the trail and do not wish to "connect" from road to trail to road again.

More experienced riders will prefer road routes, some inclined to take alternative road routes if the alternative offers the same or similar conveniences of time, distance, and grade, and advantages such as lower motor vehicle traffic volume than the "main" route. The truly dedicated bicycle tourist will prefer the most direct route, meaning the shoulder of Highway 101, no matter what other options may be available. Experienced riders will often avoid separated

Superintendent
Olympic National Park
page 2

paths, especially if the path is not paved.

This section of Highway 101 is world-renowned among bicycle tourists. The experience of bicycling the road is itself an attraction. Even if the Spruce Railroad were to be paved, cyclists will continue to ride on Highway 101 because the route is scenic, direct, and efficient. This is especially true for through-riders on longer tours. Considering my personal experience as a touring cyclist (I have ridden more than 1,000 miles on the Coast Highway), as well as the record of few bicycle crashes, the section of Highway 101 adjacent to Crescent Lake appears to be no more dangerous to cyclists than many other sections of Highway 101.

Solutions for perceived safety problems need to be made from the perspective of the cyclist as well as the motorist. Too often, cyclists are treated in a condescending manner by non-cycling planners and engineers. The best solution from the cyclists' perspective would appear to be improved shoulders on Highway 101. Non-construction options need to be considered, as well. For example, encouraging cyclists to make an early start and to obey the rules of the road may be cost-effective. Keeping vehicle traffic speed limits to the current 35 m.p.h. can, for many cyclists, make up for relatively high volumes and relatively narrow shoulders. In any event, the Lake Crescent section of Highway 101 needs to remain open to bicycle riding.

Thank you for the opportunity to comment on the draft EIS.

Sincerely,

Jim Eychaner
Recreation Resource Planner

cc: Mike Dornfeld, WSDOT



STATE OF WASHINGTON

DEPARTMENT OF COMMUNITY, TRADE AND ECONOMIC DEVELOPMENT
OFFICE OF ARCHAEOLOGY AND HISTORIC PRESERVATION
111 21st Avenue S.W. • P.O. Box 40945 • Olympia, Washington 98504-8345 • (206) 753-4011 • FAX 206-4011

February 26, 1997

Mr. Paul Gleeson
Olympic National Park
600 East Park Avenue
Port Angeles, Washington 98362-6798

Log: 012197-18-NPS
Re: Draft Lake Crescent Management
Plan/EIS

Dear Mr. Gleeson:

Thank you for sending to the Washington State Office of Archaeology and Historic Preservation (OAHP) a copy of the above referenced Draft Lake Crescent Management Plan and Environmental Impact Statement (EIS). From the document, I understand the National Park Service (NPS) is preparing this Plan in order to develop a strategy for managing the natural and cultural resources in the Lake Crescent watershed during the course of the next 15 to 20 years.

In response, I have reviewed the draft Plan to assess its effects on management of cultural resources within the watershed. In general, I concur with, and support the conclusions and recommendations incorporated within the Plan as they affect cultural resources. Also, it is my observation that the various alternatives (the no-action alternative being the exception) will affect cultural resources in similar ways.


Clearly, the alternatives will have an affect on cultural resources within the watershed. Appropriately, the Plan identifies the need to inventory resources and to evaluate and monitor the impact of actions on identified heritage properties. Also, it is important that the NPS consult with OAHP and the public as appropriate, to assess the effects of actions on the resources and identify mitigating measures when adverse effects may occur. It is recommended that the Plan reference using the *U.S. Secretary of the Interior's Standards for Rehabilitation* to guide design work on historic buildings and structures (i.e. work at Lake Crescent Lodge, Morgenroth Cabin, etc.).

Mr. Paul Gleeson
February 26, 1997
Page Two

Again, thank you for the opportunity to review and comment on the draft Plan. Olympic National Park is to be commended for addressing cultural resource protection within the Plan and giving prominence to the issues surrounding the need to protect these properties. To this end, I note that management objectives 7, 8, 9, and 13 on page 19 address the need for the Plan to recognize the importance of cultural resources in the watershed and the value of protecting these resources for the enjoyment of park visitors.

On behalf of OAHP, I look forward to working with you to implement the Plan. Should you have any questions or comments, please feel free to contact me at (360) 753-9116.

Sincerely,


Gregory Griffith
Comprehensive Planning Specialist

GAG:tjt

cc: Molly Lingval, Clallam County Heritage Advisory Board

757

CASCADE CONSERVATION LEAGUE

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97 FEB -3 PM 2: 02
OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

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97 JAN 17 AM 10: 41

OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

January 16, 1997

Supt. Dave Morris
Olympic National Park
600 E. Park Avenue
Port Angeles, WA 98362

February 1, 1997

Dave Morris
Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

Dear Sir:

The members of our Cape George Hiking group are extremely distressed to learn of your proposal to allow watercraft such as Jet-Skis the use of a portion of Lake Crescent. The noise level of this type of watercraft is absolutely intolerable to anyone trying to appreciate the peaceful beauty of the lake, such as hikers, campers or picnickers. They are also irritating and often present a danger to boaters and fishermen. The enjoyment gained from jet-skiing has nothing to do with the purpose for which National Parks were established -- preserving a wilderness experience, protecting wildlife, and allowing activities that are not obtrusive.

Allowing this use on Lake Crescent could set a dangerous precedent for other National Park lakes and could also open the door for other types of incompatible motorized vehicles-land and water.

We sincerely hope that this plan will not be put into effect.

Barbara Hinchliff
Barbara Hinchliff
Cape George Hiking Group
211 S. Palmer
Port Townsend, WA 98368

Dear Superintendent Morris:

Cascade Conservation League (CCL) would like to comment on the Lake Crescent Management Plan/DEIS. CCL supports a total ban of Personal Watercraft on Lake Crescent. CCL and its members believe that such watercraft disrupt fish and wildlife and are inappropriate uses in a national park managed to protect natural, cultural and wilderness resource values. CCL supports Alternative A of the Management Plan with the following three changes:

- 1) Ban on Personal Watercraft from Olympic National Park.
- 2) A maximum speed of 35 m.p.h. for boats.
- 3) No new construction of conference facilities

Thanks for the opportunity to comment.

Sincerely,
Charles R. Williams
Charles R. Williams
President and General Counsel



810
Central Sierra Environmental Resource Center

Box 396 • Twain Harte, CA 95383 • (209) 586-7240 • FAX (209) 586-4986

RECEIVED MAILROOM
97 MAR 13 AM 11:12

OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

March 7, 1997

Dave Morris, Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

Dear Mr. Morris:

It has come to our attention that a public process is under way to decide whether personal watercraft or jet-skis should be allowed on Lake Crescent. On behalf of our Center's 1200 members, I strongly urge you to maintain "natural quiet" on Lake Crescent and do NOT allow motorized PWC use in this special area.

It is our contention that most park visitors come to Olympic precisely to get away from the noise and air pollution these machines create. The noise from PWCs has potential to carry for large distances and disturb recreationists, sensitive wildlife species, and wilderness values in other areas of the park.

Personal watercraft are an incompatible use to the many other non-motorized forms of enjoyment in this natural setting. Jet-skiers do not need this area open to enjoy their activity; almost every other area outside of the park is open to this type of use.

Please maintain Olympic National Park as a refuge for those seeking quiet, peace, clean air, and wilderness experiences.

Sincerely,

Rich Hunter
Biologist



13144
RECEIVED
MAILROOM

97 FEB 20 AM 10:46

February 17, 1997

OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

Dave Morris, Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

Dear Superintendent Morris:

The Chequamegon Audubon Society urges you to oppose the use of motorized personal watercraft on Lake Crescent in Olympic National Park in Washington.

We believe that solitude and natural quiet are important features of Olympic National Park.

Motorized personal watercraft are properly allowed in many places, including many water bodies managed by federal and state agencies. There is no need to open national parks for these motorized uses, particularly when such uses conflict with park integrity and the quiet sought by most park visitors.

We believe that, by definition, Olympic and other national parks are special places where people and wildlife can avoid the noise, commotion, and pollution prevalent elsewhere.

Thank you very much.

Sincerely,

Leon Solberg, President
Chequamegon Audubon Society
616 Main Street West
Ashland, WI 54806

Colonel Lawrence L. Stetson, Retired
Friends of Lake Crescent

February 10, 1997

Mr. David Morris, Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

Dear Dave,

This is the first of a series of letters detailing modifications, corrections, errors, unsupported statements, and / or requests for documentation and information concerning the Draft Lake Crescent Management Plan / Environmental Impact Statement. As agreed in the meeting of January 17, if any of the requests for documentation cannot be answered in a rapid and timely manner, please advise me so a request for the information can be submitted under the Freedom of Information Act (FOIA) as appropriate. Where corrections are indicated, please advise me whether you will make the correction or not. Where modifications are suggested, please advise me whether you will change the plan to reflect the suggested modification. We, the Friends of Lake Crescent (FLOC), desire to assist Olympic National Park (ONP) in the process of improving and refining the plan by systematically identifying all areas where questions of accuracy or appropriateness exist.

Page 2, Paragraph 1:

1 "Over the past several years, visitor use has been *steadily increasing*." This statement is in error. Park figures point to a down turn in visitation during 1996 and perhaps 1995.

2 "Camping and lodging facilities are reaching maximum occupancy rates and the *lake itself is heavily used* for many forms of water recreation." No information exists to document this description. In fact, the ONP presentation at the public meetings shows a lake with essentially no surface use. In the entire presentation only one or two personal water craft (PWC) actually underway were shown. Other scenes showed only one private boat, that being moored at the dock at the Barnes Point (Storm King) launch ramp. No data exists on numbers of water craft of any description using the surface of the lake. Fewer boats use the Lake today than 25 to 35 years

2 ago. The lake is approximately 5000 acres in size. Even now, on the day of the heaviest usage, not more than 50 water craft of all descriptions use the Lake at any given time; the density is one boat per 100 acres, hardly "heavily used." If data exists to justify the use of "heavily used", please provide it. How are "occupancy rates" measured, in what units?

"A long range management plan is needed to effectively address the potential impacts resulting from *increased volumes and intensity of use at Lake Crescent*, and to guide future management decisions concerning the protection and public use of the area." No information exists to document increased volumes and intensity of use of Lake Crescent. If such information does exist, please provide it.

Page 2, Paragraph 2:

3 "The major issues needing attention include: 1) the resolution of *conflicting recreational uses* between motorized and non-motorized water craft, boaters and swimmers, and active and passive uses;" No data exists to show conflict exists. Indeed, a 5000 acre lake is more than adequate for the current and expected use. No more water craft use the Lake today than 25 to 35 years ago; in fact less do so. ONP has collected no data to support an assertion of conflict or heavy use. If such data exist to support this statement, please provide it.

4 "2) *natural processes* within the watershed including protection of the lake's ecosystems and *water quality*;" The term "natural processes" is not defined. Please provide a definition of this term and describe how or why this is a management issue and how it relates to a concern about natural and cultural resource preservation. Water quality is not an issue. Data elsewhere in the plan indicates no change is taking place even over the past century. This includes a half century of use without ONP management. If data indicating deteriorating water quality exists, please provide it. If water quality is unchanged over time and Lake Crescent remains a "reference lake" with "pristine water quality" (page 41), explain how making protection of quality will contribute to any improvement. How do you improve "pristine" quality water?

5 "5) improvement of interpretive services, including *orientation* and interpretation of significant natural and cultural resources in the area;" This phrase is a classic example of "governmentese" language. Please provide a translation or definition of this statement in plain English language that the citizen and taxpayer can understand. Explain how one "orients" a "significant natural and cultural resource."

6 "6) preservation of historic resources such as Lake Crescent Lodge, the Spruce Railroad grade, Rosemary historic district and their associated landscapes and buildings;" Explain why this

6 statement should not include Log Cabin Resort, other historic resorts around the Lake, and the Civilian Conservation Corps contribution to the Lake's history.

7 "8) impacts to scenic views and other park resources resulting from the *encroachment of incompatible land uses* near the Park boundary;" Identify specifically what incompatible land uses are referred to. Define "incompatible land uses." Explain how and where encroachment has occurred.

8 "9) involvement of area citizens, Park visitors, and *indigenous Native American cultures* in this and future planning efforts." Explain why "inholders", citizens whose private property predates the Olympic National Park and its predecessor national forest, and whose "right to the full use and enjoyment of his land" was uniquely and specifically stated in the legislation creating ONP and including Lake Crescent in ONP, and subsequent legislation, are not specifically included. Explain why "indigenous Native American cultures" will be involved in this and future planning efforts. Please show how a "culture" involves itself in any planning effort in a manner consistent with citizen and visitor involvement.

Page 2, paragraph 3:

9 "These issues need to be dealt with comprehensively and systematically to ensure that the watershed's natural and cultural resources are not compromised and the *quality of the visitors' experience* is maintained or enhanced." Provide data showing that the "watershed's natural and cultural resources will be compromised if a plan is not approved. Provide data showing a degradation of natural and cultural resources is occurring as a result of visitor or inholder actions. Define "visitor experience" and explain how the "quality" of this term has been and will be measured. Provide data demonstrating that this "visitor experience" has been "compromised" or is likely to be compromised.

Page 2, paragraph 4, the italicized quotation identified as coming from "enabling legislation";

10 This quotation appears nowhere in the legislation which created Olympic National Park in 1938. It appears only in committee report number 2247. Careful editing of the plan would have uncovered this.

Yours very truly,

Larry

Lawrence L. Stetson
President, Friends of Lake Crescent

Colonel Lawrence L. Stetson, Retired
Friends of Lake Crescent

February 11, 1997

Mr. David Morris, Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

Dear Dave,

This continues the series of letters detailing modifications, corrections, errors, unsupported statements, and / or requests for documentation and information concerning the Draft Lake Crescent Management Plan / Environmental Impact Statement. As agreed in the meeting of January 17, if any of the requests for documentation cannot be answered in a rapid and timely manner, please advise me so a request for the information can be submitted under the Freedom of Information Act (FOIA) as appropriate. Where corrections are indicated, please advise me whether you will make the correction or not. Where modifications are suggested, please advise me whether you will change the plan to reflect the suggested modification. We, the Friends of Lake Crescent (FLOC), desire to assist Olympic National Park (ONP) in the process of improving and refining the plan by systematically identifying all areas where questions of accuracy or appropriateness exist.

Page 4, paragraph 1:

11 "The Lake Crescent watershed is unique when compared to the rest of Olympic National Park in the resources it offers, by the *intensity of use* of these resources, its---." What documentation does ONP have to justify the use of this phrase? We believe there are no data supporting this statement and the Lake is not heavily used as shown in the slides of the park's presentation at the public meetings.

Page 4, Paragraph 2:

12 "The planning process is also guided by the management philosophy set forth in the *1976 Olympic National Park Master Plan*." Please provide me with a copy of this plan. Specify which portion

12 of the management philosophy is being used for guidance.

Page 4, Paragraph 4:

13 "Some of the proposed actions will be taken unilaterally by the National Park Service, while many others will require the cooperation and coordination with other public agencies, Native American tribes, area citizens, concessionaires, and business, recreational, and *environmental interests*." Why have Native American tribes been included when private citizens owning property (inholders) on the lake have not? Why is their investment and involvement sufficiently greater than landowners on the lake to justify specifically naming them here along with environmental interests? Request you include specifically "private property owner", "inholders", or "Friends of Lake Crescent" in this sentence by adding one of these words or phrases to the text. Suggest removal of the phrase "Native American tribes" since there is no evidence they used the Lake.

Page 5, paragraph 2:

14 "Some of the *more popular recreational activities* include fishing, canoeing, kayaking, motor-boating, swimming, picnicking, hiking, bicycling, environmental education, and sightseeing." Based on the park's presentation at the public meetings and observation use of "personal water craft" and "water skiing" should be included here. These activities are equally popular with kayaking and canoeing. Request they be included if this sentence remains. Explain the relevance of the sentence to the title of the section "Topography." Why is the use of the lake a part of the Lake's topography?

15 The correct spelling of "motor-boating" is motorboating (Random House College Dictionary).

Page 5, paragraph 3:

16 "Very few remnants of the past remain, but much has been documented about the lake's history since settlement." There are considerable remnants of the past, especially the lake's history since settlement by Euroamericans occurred. This statement is misleading and must be changed to be accurate. I recommend the following: "While many of the cabins and resorts built by early settlers on the lake no longer remain, much has been documented about their existence. Important examples remain in the Log Cabin Resort area as well as Barnes Point."

17 "Although little evidence has been found, it is also believed that the lake was an important site for early Native Americans." I believe this statement is in error. Provide documentation of the "little evidence" found indicating early Native American use of the lake.

18 As was noted above, explain the relevance of this paragraph on early settlement and alleged Native American use to the Lake's topography. Why is this paragraph found at all under a heading of topography?

Page 5, paragraph 7:

19 "----is operated by a private concessionaire through a contract with Olympic National Park." Is it operated under a contract or permit? Which is the more correct term?

Page 8, paragraph 3:

20 "A small amphitheater is located to the west of the campground and is used on a regular basis during the summer for interpretive and educational talks by park staff." This statement is in error. The amphitheater has not been used lately, certainly not in 1996 and possibly 1995, ostensibly because of lack of funds.

Page 8, Issue 4:

21 "The campground is heavily used during the summer months ----." This phrase is in conflict with the description of campground usage found on page 52 which states: "Use of Fairholm campground has fluctuated over the years; recent use levels have been significantly lower than in previous years." Which statement is true? Please advise me.

Page 8, Issue 5:

22 "The campground does not consistently provide visitors with a desirable experience?" Define, for me, what this phrase means. What documentation exists to support the assertion that visitors are not getting whatever a "desirable experience" is?

Page 8, Issues 6 and 7:

23 "Personal watercraft (PWCs) create noise and safety hazards for other lake users in the area." "Personal watercraft (PWCs) create noise and safety hazards for other lake users in this confined area." Why is the same idea repeated in two adjacent sentences? Why do both "bullets" relate to the same issue? Is there any evidence to support that PWCs in this area exceed the noise abatement standard in the CFR (section 3.6)? If they do not exceed the levels specified in the CFR, why is there an issue about noise? If they do not exceed the standard, how can there be a "hazard"?

Yours very truly,

Larry

Lawrence L. Stetson
President, Friends of Lake Crescent

Colonel Lawrence L. Stetson, Retired
Friends of Lake Crescent

February 12, 1997

Mr. David Morris, Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

Dear Dave,

This continues the series of letters detailing modifications, corrections, errors, unsupported statements, and / or requests for documentation and information concerning the Draft Lake Crescent Management Plan / Environmental Impact Statement. As agreed in the meeting of January 17, if any of the requests for documentation cannot be answered in a rapid and timely manner, please advise me so a request for the information can be submitted under the Freedom of Information Act (FOIA) as appropriate. Where corrections are indicated, please advise me whether you will make the correction or not. Where modifications are suggested, please advise me whether you will change the plan to reflect the suggested modification. We, the Friends of Lake Crescent (FLOC), desire to assist Olympic National Park (ONP) in the process of improving and refining the plan by systematically identifying all areas where questions of accuracy or appropriateness exist.

Page 9, paragraph 2:

24 "Located along the *south* shore of Lake Crescent, Barnes Point offers *more* level terrain than other locations around the lake." Actually, Barnes Point is more accurately located on the "southeast" shore of the Lake. The lake shore turns west after Barnes Point (see map, page 6). The use of the word "more" indicates an existence of data to support the assertion that Barnes Point is more level than, say the area around the entrance to the Lyre River. Please provide such documentation.

25 "As such, it has been the *obvious* location for development (see Barnes Pt. map)." The word "obvious" is an exaggeration. Other locations, such as the Piedmont area were equally "obvious." Recommend replacing this word with one such as "important" or or eliminating it all together.

26 "A privately run tour boat operates from this area." As off the fall of 1996, the tour boat no longer is in operation. (Statement by Jim Schultz, Oct. 28, 1996) While it is true, the boat is still moored at the launch ramp dock, Ranger Dan Mason indicates this is only temporary. More accurately the sentence should read: "A privately run tour boat has operated from this area over the past three summers; park policy is to encourage continued operation of a tour boat on the Lake."

Page 9, paragraph 5:

27 "Bovee's s Meadow is used predominantly by Clallam county residents and is widely used among these users as a family-oriented area." The extra "s" following "Bovee's is an obvious typographical error deserving elimination. What data exists to support the assertion "used predominately by Clallam county residents"? Many people from other places use this area for day recreation, including visitors staying at the lodge, Lake residents, and the general tourist population visiting the Lake. Please provide appropriate data or correct this phrase. Similar logic applies to the term "family oriented" which, while this usage may be encouraged, is certainly not exclusive.

Page 9, issue 1:

28 "The use of personal watercraft (PWC) in the area has resulted in conflicts, not only with day users, but nearby residents." Please provide documentation of these conflicts to demonstrate a preponderance of occurrences to support this statement. Certainly, since many of the PWC operators are day users themselves, I doubt they are in conflict with themselves. Rewrite this sentence to make it more accurate.

29 "Noise generated by these watercraft disturb the serenity of the lake for many visitors and creates potential safety hazards for PWC operators, other boaters, and swimmers. Document how "noise" disturbs the serenity of the Lake if it is in compliance with the 36 CFR, section 3.7. How does this "noise", which is presumably in compliance with the CFR, endanger "PWC operators, other boaters, and swimmers" by creating a "safety hazard?" Provide documentation to support this statement or change it.

Page 9, issue 2:

30 The term "social trails" should be defined more completely since this is "governmentese" and not

30 in general use by the public as a whole.

Page 11, portion of issue continued from page 9:

31 "Additionally, RV parking is not provided, exacerbating traffic congestion during periods of heavy use." While there may be no formal, exclusively designated parking for recreational vehicles (RVs), RVs can and do park in the visitor parking area and the boat trailer parking area. Obviously then, there is parking provided. Document the term "heavy use." How many days does it occur (whatever it, "heavy use", means)? Are park facilities designed for maximum peak use? For normal use? For average use? For peak use season average use? What policy exists guiding facility design?

Page 11, paragraph 1:

32 "This resort is comprised of a main lodge, several cabins, parking areas, maintenance building, RV camping area, boat ramp, and docking facilities (see Log Cabin site map). While the word "several" can mean than two but fewer than many, it traditionally as been synonymous for three. Certainly there are more than three cabins at Log Cabin Resort. How is a "cabin" different from a "chalet?" (See Log Cabin site map and The Random House College Dictionary.)

33 "As in the case with Lake Crescent Lodge, Log Cabin operates only during the summer months." Current operation policy for Log Cabin Resort will be year-round operation (Jim Schultz, Oct. 28, 1996). Please correct this statement.

Page 11, paragraph 2:

34 "Log Cabin has no formally designated area for day use, although the shoreline in the RV area and the area in front of the A-frames are used in this manner by visitors of the resort." Designated or not, the area in front of the lodge is the accepted day use area by visitors. The area in front of the "A-frames" is used, almost exclusively, by residents of those facilities. The final preposition should more correctly be "to" and not "of." Please correct these errors.

Page 11, issue 1:

35 "Some parts of the shoreline are showing signs of overuse, particularly near the mouth of the creek in the RV area." This statement is misleading in that the creek is "adjacent" to the RV area not "in" the RV area. Document what specific signs of overuse exist, especially since the level of the lake during the winter and spring months rises to inundate this entire area. (Visit to area in

January 1997.) Please correct these errors:

- 36 "Additionally, several *social trails* cross this stream channel upstream and have *denuded much of the riparian vegetation*." Document loss of "riparian vegetation" as a direct result of the "social trails" as opposed to the seasonal torrents of water flowing periodically in the creek. During a visit to the area in January 1997, "no evidence that social trails denuded much of the riparian vegetation was discovered. Please correct these errors.

Page 11, issue 2:

- 37 "The RV *campground encroaches* on the riparian zone of Log Cabin Creek and the lakeshore, *resulting in erosion and loss of habitat*." Explain how a "campground encroachment" can cause erosion and loss of habitat rather than RV campers themselves? What or whose habitat is being referred to? Explain how encroachment results from use of the RV campground rather than the seasonal rise in the level of the Lake which inundates the shoreline each year for several (3) months or more. Please correct these errors.

Page 11, issue 3:

- 38 "Log cabin has developed in a haphazard fashion, with a *variety of architectural styles* that are *not consistent with a national park setting* and do not meet the *Park's long-term vision* for this resort." The "variety of architectural styles" has historical significance since at least some of the cabins were originally located at the Arcadia Resort and brought to their current site by barge. They should be protected. What plans does the park have to accomplish this?

- 39 The issue refers to an "architectural style" and indicates the existing style is "not consistent with a national park setting." This statement implies that a standard for an "architectural style consistent with a national park setting" exists. What is this standard? Where is this standard documented in law, regulation, code, or policy? Why is the application of this arbitrary, and heretofore unknown, standard more important than the preservation of the historical content and significance of the cabins from Arcadia Resort? Provide this information.

- 40 The issue also infers the existence of a "long term vision" for Log Cabin Resort. What is the Park's long term vision for Log Cabin Resort? Where is this vision documented in law, regulation, code, or policy? Provide this information.

Lastly on this issue, a typographical error exists, wherein the apostrophe is missing from the word "Park s." As a side note, this seems to be a very common error made throughout the entire

document indicating no editing or review occurred during its preparation. Perhaps no supervisor took the time to actually read the entire document carefully before it's printing and subsequent release to the public.

Page 11, paragraph 1 under "La Poel":

- 41 "Originally the site of a resort, this area was developed as a campground by the Civilian Conservation Corps (CCC) in 1934-35, and was used as a campground for many years until the *failure of the septic system necessitated its closure*." The septic system did not fail but was updated from a "leach pit" to a "leach field" sometime in the late 1980's according to information obtained under the Freedom of Information Act. Is it not true the campground was closed for economic and policy reasons (like the flush toilet comfort station) rather than any other reason? Please correct these errors.

I request this and all previous letters and communications related to the Draft Lake Crescent Management Plan / Environmental Impact Statement be made a part of the official and permanent record relating to the development and approval of this EIS.

I look forward to hearing from you with answers to the questions and comments contained herein.

Yours very truly,

Larry

Lawrence L. Stetson

President, Friends of Lake Crescent

Colonel Lawrence L. Stetson, Retired
Friends of Lake Crescent

February 13, 1997

Mr. David Morris, Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

Dear Dave,

This continues the series of letters detailing modifications, corrections, errors, unsupported statements, and / or requests for documentation and information concerning the Draft Lake Crescent Management Plan / Environmental Impact Statement. As agreed in the meeting of January 17, if any of the requests for documentation cannot be answered in a rapid and timely manner, please advise me so a request for the information can be submitted under the Freedom of Information Act (FOIA) as appropriate. Where corrections are indicated, please advise me whether you will make the correction or not. Where modifications are suggested, please advise me whether you will change the plan to reflect the suggested modification. We, the Friends of Lake Crescent (FLOC), desire to assist Olympic National Park (ONP) in the process of improving and refining the plan by systematically identifying all areas where questions of accuracy or appropriateness exist.

Page 14, Issue 1:

42 What documentation is available to substantiate this statement?

Page 14, East Beach, first sentence:

43 Provide justification that East Beach is heavily used. Provide information documenting that "Clallam County residents" are the predominate users.

Page 14, East Beach, last two sentences:

44 An apparent conflict exists between the concepts of difficult access for recreational vehicles which alludes to their use of the road and the concept of posting signs prohibiting their access. While it might be true, that the prohibition of recreational vehicles is a result of the steep road, it is by no means clear that this is the case. Please clarify what is really meant.

Page 14, second East Beach issue:

45 Explain the relationship between the "proximity of vehicle parking and overuse during the summer months is (are) evidenced by erosion along the shoreline bank" considering the rise in water level during the winter and the "erosive forces associated with extreme winter storms that exceed 60 mph and create waves higher than three feet" (page 40). Is there a relationship between the proximity of vehicle parking and overuse of vault toilets? Does the former cause the latter? How can vault toilets be overused when they are basically a holding tank for excrement until it can be collected and disposed of elsewhere? Why is this an issue if ONP is responsible for servicing the toilets? In short, just what is the issue here?

Page 14, North Shore, paragraph 1:

46 In sentence 1, if the area is intended to encompass the entire shoreline from Fairholm to the Lyre river, the correct directions should be the north and west to describe the shore. (See map on page 16). The last sentence uses the word several which is commonly associated with the quantity 3. We suggest this be changed to reflect the fact there are many more than three private property owners in this area. In the last sentence reference is made to "Lyre River Road", yet elsewhere ONP calls the entire road from US highway 101 to the west Spruce Railroad Trail trailhead the "East Beach Road." What is the correct Clallam County and/or ONP approved term?

Page 14, North Shore, paragraph 2:

47 What documentation exists to justify the statement this area "receives the least amount of use" and "the picnic area is not heavily used?" Washington DOT seem to think ONP believes there are some 20,000 visitors to the Spruce Railroad Trail. What is the correct usage figure? Is it not true that the state of ONP maintenance of this area may be a significant factor in its usage?

Page 14, 17, North Shore:

48 The discussion does not adequately cover the use and purpose of Camp David Jr. A paragraph should be added covering this significant and important Clallam County facility.

Page 17, North Shore, issue 1,

49 We believe there is a direct correlation between the lack of ONP maintenance and the alleged erosion of the bank. Please justify that the "presence of social trails and lack of stairs" is the primary factor in the alleged general erosion of the bank.

Page 17, North Shore, issue 2:

50 The failing culverts discussed should more correctly be called "stream culverts," not

"drainage culverts," since drainage ditches do not exist on the old railroad bed in the location referred to.

51 Page 17, Visitor Services/Facilities, paragraph 2:

The "ranger presentations" did not occur during 1996, being canceled for lack of funding (Ranger Mason). Similarly, the tour boat *Storm King* will not operate during 1997 (Ranger Mason). Therefore, neither of these programs are occurring "presently." This sentence must be rewritten for correctness.

52 Page 17, Visitor Services/Facilities, paragraph 3:

In the first sentence, the tour boat *Storm King* has ceased operation and therefore should be deleted from this sentence in the interest of accuracy. Also in each place where the word contract occurs in this paragraph, it should be exchanged for the words "contract/permit" since, at least, the Fairholm Resort is operated under a "permit" rather than a contract.

53 Page 17, Visitor Services/Facilities, Issues:

Explain what "sense of entry" means within the context of US highway 101 being a commercial route whose right of way belongs to the State of Washington. In sentence 2, the word "park s" should have an apostrophe. In sentence 3, the statement that *the presence of and the location of private residences along the lake shore compounds this perception* (of a lack of awareness that persons traveling US highway 101 have entered a national park) is discriminatory, divisive and inaccurate taking into consideration the language in all legislation creating and expanding Olympic National Park which specifically guarantees the right of land owners the "full use and enjoyment" of their land. We vigorously object to the negative implication that inholders somehow don't belong on Lake Crescent.

54 In issue 2, *under-capitalized* should be changed to another term that does not refer to insufficient monetary assets (Random House Collegiate Dictionary) for we doubt this is what is meant. What is meant by the term "interpretive opportunities" in this issue?

55 In issue 3, reference is made to "physical improvements that are not consistent with a national park setting." What is the definition of physical improvements that are "consistent with a national park setting?" In the second sentence reference is made to concession operations that "may detract from the ambiance of this (presumably national park) setting. What is the definition of "ambiance" that is "consistent with this setting?" In the same sentence, reference is made to concession operations that may "result in negative impacts to natural and cultural resources, as well as visitor experience." What is concession operations will cause this result? What natural and cultural resources will be affected? What is "visitor experience" especially in the context of

concession operations? What concession operations will cause this negative experience?

56 Page 18, Transportation/Circulation:

Why is only hiking or bicycling specified as the alternate modes of transportation highlighted for priority expansion? Should not horseback riding be included also? Should not boating and use of PWC's be included since water transportation was a very important historical method used for transportation by early settlers?

In the only issue listed, the phrase "Extremely hazardous" is used to describe road conditions around the lake in terms of cyclists use. How can this be true when Washington State Department of Transportation has no recorded bicycle/vehicle accidents during a study period from November 1, 1990 to October 31, 1996, a period of six years and any minor incidents that did occur were not severe enough to require reporting to the Washington State Patrol? (see DOT Draft plan for Lake Crescent, page 14.) The term extremely hazardous cannot be documented and substantiated and must, therefore, be removed. In the last sentence, the apostrophe is missing from "Clallam County's transit system."

57 Page 18, Water Recreation, paragraph 1:

What is the meaning and significance of the statement "Lake Crescent is a natural lake within a national park? Are not all lakes in the management area natural? What man made or otherwise non-natural lakes are included in the management area? What are the "values the visitors, and residents alike, seek in their recreational experience?" How do the "clarity of the water, serenity of the lake environment, and the presence of high quality, natural, historic and natural resources, call for management? Call is generally defined as something a person does. Since the current condition of the lake is the result of a century of use, half outside and half under the ONP management, and is generally agreed to be at least satisfactory and not in the least improved by approximately 50 years of ONP management, explain the need for management of "lake environs?"

58 Page 18, Water Recreation, paragraph 2:

The second sentence states: "Use of the lake for water recreation has increased in the past several years, and will likely continue to do so as more people travel to the Olympic Peninsula." How can this be true since ONP data shows a decrease in usage in at least the last year? Anecdotal evidence indicates there are less water craft using the Lake now than during the lake 1950's. What basis in documentation exists to support the statement that use "will likely continue to do so as more people travel to the Olympic Peninsula when tourism is reduced and more land is re-designated as wilderness and withdrawn from general use?"

Page 18, Water Recreation, issue 1:

59

How many is "several?" The second sentence alleges the "absence of any limitations to use of the lake." How can this be true when ONP has a water craft safety program and routinely (normally annually) publishes a list of rules and guidelines? (Ranger Dan Mason) How can this be true when 36 CFR, part 3 specifically covers boating and water use activities in national parks and section 3.6 lists prohibited operations? How can this statement be true when section 3.7 of the same part 3 addresses noise abatement? How can this statement be true when other sections in the same part 3 address water skiing, swimming and bathing, surfing, and SCUBA and snorkeling? Furthermore, how can the final sentence be true given the existence of specific federal rules for noise abatement and limits in national parks? How is the term "visitor experience" used the the last sentence defined, especially if national park service noise abatement standards are being met?

Page 18, Water Recreation, issue 2

60

We do not believe that there has been "increased recreational use" of Lake Crescent. Indeed, anecdotal evidence indicates the numbers of water craft is actually less than past years (1950's). What documentation does ONP have to support this assertion? In the absence of proof, this statement must be eliminated. While funding or the lack of what ONP believes is necessary may be an issue, ONP has adequately administered the Lake in the past with a far smaller staff than today. Use of a more economical patrol water craft such as a large, donated PWC would be of use. Use of these craft is widely accepted among other regulatory and law enforcement agencies including Clallam, King, and Pierce County sheriff's departments. This option should be fully explored in this document purporting to analyze the needs of the Lake Crescent watershed and management area. Please explain why is has not?

Page 19, Management Objectives:

61

In objective 1, the word "pristine" is used to describe the water quality of Lake Crescent. Pristine is defined in the Random House College Dictionary as having its original quality. Lake Crescent water is of sufficiently high quality so as to be termed "reference lake" by the Washington State Department of Ecology (page 40 in this draft plan/EIS). Given the century of use both before and subsequent to ONP, and the declining use, there is not valid reason for this objective. It is being achieved and will continue to be achieved without interference, help, hindrance or regulation by ONP.

62

Objective 2 concerns outdoor and recreation uses that "minimize conflicts between recreational users and are compatible with the protection of park resources and values." What are the specific uses that meet this standard? What does "compatible with the protection of park resources and values" mean? Define "compatible." Specifically, what conflicts are being referred to here?

63

Objective 3 mentions old growth forests "especially in the Barnes Point area." Logging was done in this area around the turn of the century as evidenced by the spring board holes in existing stumps. Apparently only trees of a certain size and species were harvested because of operational considerations. What definition of "old growth forests" is being used here?

64

Objective 4 mentions "the lake s unique fish species" but elsewhere in the plan (page 45) relates that hybridization occurred in the Crescent trout (a.k.a. Crescenti?), which is correct? The fish indigenous to Lake Crescent are identified as the Beardsley trout, the Crescent trout, and the Lake Crescent whitefish. Last year the ONP fisheries biologist, John Meyer, told me the three species were the Beardsley (a rainbow), the Crescenti (a cutthroat), and the Kokanee which was characterized as a landlocked sockeye. Explain the apparent contradiction. Which are the three traditional endemic species? If the Kokanee are indeed a landlocked sockeye as Meyer explained, how can all fish in the lake be non-anadromous? As a minor point, the word lake s requires an apostrophe.

65

Objective 6 seeks to improve visitor orientation, interpretation, and visitor services. Please explain what is meant here. How will improvement be measured? How are visitor orientation, interpretation, and visitor services measured presently? The Government Performance and Results Act (GPRA) taking effect this fall will require these things. How the requirements of this law are being met in this plan?

66

Objective 7 mentions the "Morgenroth Cabin." In fact, the cabin was historically called "The Forest Service Visitors Center" or "The Old Forest Service Visitors Center." (John and Mary Morgenroth) I suggest you research the name with them as John is a direct descendent of Chris Morgenroth, early Olympic National Forest ranger and builder of the cabin..

67

Objective 8 mentions the "historic setting and character of the area." Please define this (these) terms more fully so those outside government and the Park Service know what is meant.

68

Objective 9 calls for "minimizing the impacts and effects of private development on the visitor experience." What, exactly, is meant by this? How does this comply with section 255 of 16 USC, chapter 1?

69

Objective 12 says "Foster appreciation and protection of cultural and natural resources of the Lake Crescent are through inventory, monitoring, and interpretation." What exactly does this mean? What is the intent of this objective?

I request this and all previous letters and communications related to the Draft Lake Crescent Management Plan / Environmental Impact Statement be made a part of the official and permanent record relating to the development and approval of this EIS.

I look forward to hearing from you with answers to the questions and comments contained herein.

Yours very truly,

Larry

Lawrence L. Stetson
President, Friends of Lake Crescent

Colonel Lawrence L. Stetson, Retired
Friends of Lake Crescent

March 15, 1997

Mr. David Morris, Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

Dear Dave,

This continues the series of letters detailing modifications, corrections, errors, unsupported statements, and / or requests for documentation and information concerning the Draft Lake Crescent Management Plan / Environmental Impact Statement. As agreed in the meeting of January 17, if any of the requests for documentation cannot be answered in a rapid and timely manner, please advise me so a request for the information can be submitted under the Freedom of Information Act (FOIA) as appropriate. Where corrections are indicated, please advise me whether you will make the correction or not. Where modifications are suggested, please advise me whether you will change the plan to reflect the suggested modification. We, the Friends of Lake Crescent (FLOC), desire to assist Olympic National Park (ONP) in the process of improving and refining the plan by systematically identifying all areas where questions of accuracy or appropriateness exist.

Page 39, Air Quality:

70 Paragraph 2 documents "no monitoring stations exist within the Lake Crescent watershed." Paragraph 3 discusses alleged point sources of pollution on the Olympic Peninsula, an area outside the management area. Since there is no documentary evidence to indicate any connection between the point sources and the air quality within the management area, paragraph 2 should be removed in entirety as irrelevant to the area being studied. Indeed, the first sentence of paragraph 3 states "air quality in the Lake Crescent watershed is good."

71 Paragraph 3 goes on to make hypothetical statements about various factors that might (or might not) impact air quality in the management area. The source in a Resource Management Plan, 1990) which fails to provide any documentary source. The next sentence attempts to connect these hypothetical factors with industrial and urban sources in Port Angeles. Once again,

71 no documentary evidence is give, only a vague reference to the Resource Management Plan, 1990. What follows is a blatant attempt to connect unmeasured emissions from boats and automobiles within the water shed (admittedly unmeasured) to allegations of pollutants appearing in "plant tissue at higher elevations" (location unstated). There is, in fact, no connection between the supposed emissions of "boats and automobiles" (presumably trucks don't emit any emissions) and air quality within the management area.

The whole section on air quality is poorly written, lacks documentation, contains conflicting statements, and contains statements irrelevant to the management area under study. I must be deleted until a well researched, fully documented, coherent discussion can be prepared and evaluated.

72 What evidence exists to document emissions (within the management area) from boats and cars? To compare them with trucks? To connect them to any evidence of pollutants in wildlife, plant tissue or fish within the management area? Please provide such evidence.

Page 39, Water Resources

73 Provide documentary evidence supporting the statement "Lake Crescent once drained into the Elwha River valley until a massive landslide separated the lake from present day Lake Sutherland."

Page 39, Water Resources, paragraph 4 (continued on page 40):

74 Provide evidence to support statement the lake surface elevation averages 585 feet and that it varies 3 to 6 feet depending on runoff. Anecdotal evidence supports a different average elevation and far less variation in lake level (See plan response by Mr. Gordon K. Greene). Please provide documentation of your statement.

Page 40, paragraph 3:

75 Please furnish me with a copy of the Watershed map described as a reference.

Page 40, paragraph 5:

Please furnish me with a copy of the National Wetlands Inventory maps (1987 or more current) that show or otherwise identify the 22 wetlands mentioned.

Page 40, Water Quality, paragraph 1:

76 Please provide titles of the "several water quality studies" that were conducted during the 1980's referred to in the first sentence. Please furnish me a copy of the report referred to as *Trophic Status Report, 1991*. This paragraph seems to accurately describe Lake Crescent. There

seems, however, little connection between this paragraphs 2 and 3 of this section on Water Quality. Please explain this conflict and disconnect.

Page 40, Water Quality, paragraph 2:

77 The third sentence makes the statement *Drain fields and septic tanks within close proximity to the shoreline are at risk* While this may be true in a generic sense, no where does the plan make reference any drain fields and septic tanks on Lake Crescent that are **actually located** close enough to the shoreline to be exposed to winter storms. Since there is no evidence of *septic enrichment* despite exhaustive attempts to discover it, I conclude no septic system is failing, has been damaged by winter storms, or is causing *enrichment*. If there are none, then these statements must be deleted. Again there is a woeful lack of appropriate documentation. Please provide documentation of any failing or leaking septic systems.

Page 41, Water Quality, paragraph 1:

78 Explain and document which failing septic systems exist or delete this phrase from paragraph. What evidence is there to suggest that hydrocarbon spills or leaks have contributed to pollution in the lake given the documentary evidence in the first paragraph on Water Quality, page 40? Water recreation is decreasing, especially motorized applications, when compared to historic levels over the past 100 years. If fact, ONP official figures indicate a decrease over the last two years. How can this paragraph be correct? What evidence exists to document any past hazardous material spills have occurred? What evidence exists to document that hazardous cargo is being carried over Highway 101 past Lake Crescent. This whole paragraph and in fact the whole section on *Water Quality* must be revised and rewritten. Nothing is documented, wholesale conflicts exist, and innuendo abounds! The whole section is shoddily researched and poorly written. Who wrote it?

Page 41, Geology and Soils, paragraph 3:

79 If no official soil classification or mapping in ONP or the Lake Crescent management area has been conducted, how can the description of the soils (sentence 1) be accurate?

Page 41 and 42, Topography:

80 Anecdotal evidence exists to challenge specific elevations, depths, etc. (see comment letter from Mr. Gordon K. Greene).

Page 43, Fire:

81 Provide documentation of all fires, manmade or otherwise occurring in the management area since 1938 to include location, cause, size, and date.

Page 43, Logging:

82 Timber harvesting did occur in the management area evidence by second growth forest, and stumps bearing spring board holes especially in the Barnes Point area. Document the statement During this time, a significant portion of the lake shoreline had passed into private ownership, much of which was cleared for building construction. Nothing exists to my knowledge to show wholesale clearing of the shoreline for construction. Document or remove the sentence. NPS documentation (Wagner study) indicates no construction of the Spruce railroad occurred during WWI. You are in error. Provide copies of the records (period 1953 to 1957) showing removal of 4.3 million board feet from the watershed (which one by the way?). How can this statement be made if the final sentence is correct in that "no information" exists?

Page 43, Size Classification:

83 Provide documentation to support the last two sentences apportioning forest by size. Please also define for me the terms used.

Page 43, Rare, Sensitive, and Special Plants:

84 Provide copies of the surveys referenced in the second paragraph.

Page 44, Exotic Plants:

85 Provide a copy of current maps, etc. referred to.

Page 44, Wildlife:

86 Provide copy of *RMP, 1991* referred to in the first paragraph.

Page 44, Mammals:

87 Provide documentary evidence to support the statement on introduction of mountain goats since anecdotal evidence of Native Americans and other early pioneers indicate their existence in ONP. Explain how they could not have migrated here from known habitats in the Cascades.

Page 45, paragraph 1:

88 Remove the first complete sentence since it is conjecture and has no basis in fact.

Page 45, Fish:

89 The discussion of fish in the plan differs from the monograph attributable to John Meyer on the fish study undertaken in Lake Crescent 1996. The fish hatchery was situated approximately half way between the present location of the Storm King Ranger Station and the pedestrian underpass under Highway 101. What species were raised there for introduction into Lake Crescent? Please provide documentation to support an assertion that exotic fish were

89 released into Lake Crescent or its tributaries and that such a release resulted in hybridization. What exotic species, if any, were released into Lake Crescent? The fish indigenous to Lake Crescent are identified as the Beardsley trout, the Crescent trout, and the Lake Crescent whitefish. Last year the ONP fisheries biologist, John Meyer, told me the three species were the Beardsley (a rainbow), the Crescenti (a cutthroat), and the Kokanee which was characterized as a landlocked sockeye. Explain the apparent contradiction. Which are the three traditional endemic species? If the Kokanee are indeed a landlocked sockeye as Meyer explained, how can all fish in the lake be non-anadromous?

90 What studies were made to justify the decision to increase the minimum size limit from 12.20 inches? What are the normal sizes of mature fish of the species normally found in the Lake?

Page 45, Endangered, Threatened and Candidate Animal Species:

91 The northern spotted owl is listed as threatened. Isn't it true this species has been removed from the threatened list? If so your listing it as threatened is incorrect.

Page 46, Cultural Resources, paragraph 1:

92 The third sentence *Still there are archaeological sites, cultural landscapes, and historic structures that speak to these older lifeways.* is misleading and should be removed. The only archaeological remains present relate to Euroamerican settlement.

Page 46, Cultural Resources, Lake Crescent Prehistory:

93 What specific evidence is there to document human use of Lake Crescent prior to the Euroamerican settlers appeared? The whole discussion deals with words like *suggests, likely, appears*, etc. which have no place in an accurate documented study. In fact the shifting plates could just as well have been below sea level given the plate movement, seismic and volcanic activity the Pacific Northwest is so well known for.

In the second paragraph, **no archaeological remains associated with Lake Crescent Prehistory were found.** In fact this whole paragraph has no place in this section.

The third paragraph alludes to planned archaeological investigations using extensive heavy excavations with heavy construction equipment. Such investigations will damage the forest and its components. Please provide a list of all contemplated, planned, desired investigations that may be undertaken in the Lake Crescent Management Area.

The whole section on prehistory is badly written, poorly researched, couched in vague language, and obviously not edited. It must be completely rewritten.

Page 46, Cultural Resources, Lake Crescent Native American Use:

94 The discussion of Native American use of the Lake is nothing more than optimistic,

94 politically correct conjecture. The stories are from a book of myths which I would like to Norse myths. They are just that -- myths. There is as much truth in a notion than Thor, Odin, and Loki were present in the Lake Crescent Area as there is in the myth of personification of Mount Storm King. Without documentary evidence, the whole discussion must be deleted or at the most, modified to state that no evidence of Native American use of Lake Crescent exists. In fact, according to the myths cited, the Lake was a place of taboo, therefore no Native American presence.

95 Page 48, paragraph 3:
I suggest you check references dealing with construction of the Spruce Railroad.

96 Page 49, Morgenroth Cabin:
The correct name for this structure was the Forest Service Cabin although it was built by Morgenroth. The current structure located at Barnes Point and called the Storm King Ranger Station is a replica of the original structure recreated on a new site. This distinction is made later on but the second sentence is incorrect and should be changed.

97 Page 50, paragraph 2:
It should be noted that \$150,000 was spent for the reconstruction of what is now the Storm King Ranger Station. Very few original materials were used. Your discussion is very misleading. Is this intentional?

98 Page 50, Spruce Railroad Trail:
The road labeled *North Shore Road* is actually the Camp David Jr. Road. The area labeled North Shore Picnic Area should be correctly called the Ovington Picnic area since it is on the grounds of the former resort.

99 Page 50, Archaeological Sites and Ethnographic Resources:
This whole section is written with politically correct wishful thinking language not grounded in truth. Words like likely spot, *it is likely, may be present, expected, high potential, good archaeological potential, may be*, etc. have no place in this plan in the absence of documentary evidence to support their likelihood. The entire section on pages 50 and 51 must be deleted.

Please provide documentary evidence to support the statement at the bottom of page 50 which reads: *One historical artifact scatter has been identified within the Lake Crescent Lodge historical district.*

Page 51, Recreational Resources:

100 The phrase *Many visitors* in the last sentence should be changed to *Visitors and inholders alike*.

101 Page 52, Visitor Use Patterns and Trends:
In the first paragraph data is cited as appearing in *Appendix*, where is it?
I take issue with the accuracy of the statement that use levels on the Olympic Peninsula are anticipated to increase. The first fact may be correct as far as it goes but as stated in ONP quarterly newsletters, recent trends are downward. With the increase in entrance fees, back country quotas, the decline of salmon sport fishing, and general malaise in the overall economy of the peninsula additional decreases seem more likely than increases. Your data covers a variety of unequal periods and appears to deliberately conceal the recent decline in visitation. Why? This whole section should be revised to be consistent with the actual data.

102 Page 52, Visitor Origin:
In the absence of visitor surveys (preceding paragraph on page 52) how can there be evidence to support the assertions in this paragraph. I submit that the majority of the visitors to the Lake come from Port Angeles and the surrounding communities and feel I have an equal level of evidence to support this statement. The paragraph should be revised to be consistent with the actual data.

103 Page 53, Main Attraction:
What is the intent of the second sentence which by the way is only a phrase and not a sentence? What data or study or studies support the figures given?

104 Page 53, Length of Stay:
No data is cited to support the statements on length of stay. Does it exist or is this a *guess*? Provide us copies of data or study or studies support the figures given.

105 Page 53, Party Size:
No data is cited to support the statements on party size. Does it exist or is this a *guess*? Provide us copies of data or study or studies support the figures given.

106 Page 53, Day Use Areas:
Since no actual records are maintained on use of any of the swimming areas, what supports the statement on which receive the heaviest use? What supports the statement that the major users of the swimming area at Fairholm are visitors from the campground and not, for instance, residents of Sappho, Beaver, or Forks? Again, we recommend changing the name of the

North Shore Picnic Area to the Ovington Picnic Area.

Page 53, Water Recreation:

107 Change the first part of the first sentence in the second paragraph to read: *Lake Crescent is a popular summer destination.* The Lake is empty during the winter months. The word *jetskiing* should be changed to PWC or use of personal water craft. I note that boat fueling facilities are not currently offered at Log Cabin contrary to your statement. Rules governing operation of water vessels were in existence long before 1994. Current operation is guided by local Boating Regulations and federal regulation not an unpublished Water Safety Plan of 1994.

I take issue with the statement concerning the popularity of recreational fishing. Since the change in the minimum length of fish, it is no longer popular.

Page 54, paragraph 2:

108 The Storm King no longer operates on the Lake. The incompleteness of this paragraph is representative of ONP's support for the operation of the ill fated Storm King. Delete this paragraph.

Page 54, Camping:

109 The statement "La Poel was also used for camping, but failure of the septic system resulted in its closure." is untrue. The septic system did not fail, it was upgraded (ONP response to FOIA request). The closure was apparently an ONP administrative decision. Why was La Poel closed to overnight camping? Provide copies of memos, studies, etc. that resulted in the decision to close the campground to overnight camping.

Page 55, Log Cabin Resort.

110 Log Cabin is currently open all year not just in the summer season. The description does not mention the restaurant which is an important part of the resort. The description should be changed to reflect current operations.

Page 55, Storm King Interpretive Tours:

111 Delete entire paragraph since the boat no longer operates on Lake Crescent.

page 55, Transportation:

112 The statistics quoted ignore current information which shows a downturn in usage of Highway 101. During the off season, the traffic consists of commuter, residential, and commercial traffic.

Page 56, Transportation:

113 In the second paragraph, there is a source cited for the accident rate, but not identified. What is it? Please provide a copy. The plan makes a statement that Highway 101 is especially hazardous for cyclists yet DOT and WSP records do not show any recordable or serious accidents. This is in direct contradiction with the plan statement. Since the record authority is Washington State, the plan should be changed to eliminate this statement.

Page 56 and 57, Land Use and Ownership:

114 One again the plan lists a reference in an unpublished appendix (see paragraph 2, page 57). In the same paragraph the park expresses concern with the actions of inholders while advocating the very same activities for itself. This is unacceptable. Why should inholders not have the same rights as ONP? Historical record shows inholders have not contributed to a lowering of water quality, nor to any other change in natural patterns. What ONP has done is apply two different standards, one for inholders and one for ONP.

There is no general conflict between inholders and visitors. This concept is fabricated by ONP in an attempt to justify overly restrictive regulation. The justification cited is a few isolated concerns not a general dissatisfaction. The Friends of Lake Crescent categorically deny any general conflict between inholders and visitors.

One again the false assertion of increasing use of the lake is made in an attempt to justify the plan and more restrictive regulation. Lake Crescent is simply not more heavily used today than in the past and future increases are not nearly as likely as ONP would suggest. Indeed, their own data point to a decline.

This whole section is inaccurate and misleading as must be totally rewritten.

Page 57, Interpretative Programs.

115 A total rewrite is necessary since the Storm King no longer operates on the Lake and programs have not been held in the past two years at Fairholm campground.

I request this and all previous letters and communications related to the Draft Lake Crescent Management Plan / Environmental Impact Statement be made a part of the official and permanent record relating to the development and approval of this EIS. Please notify me personally if for any reason you feel you are unable to include this document and my comments and the previous documents and comments in this series in the official Lake Crescent Management Plan/EIS record.

I look forward to hearing from you with answers to the questions and comments contained herein.

Yours very truly,

Larry

Lawrence L. Stetson
President, Friends of Lake Crescent

Colonel Lawrence L. Stetson, Retired
Friends of Lake Crescent

March 16, 1997

Mr. David Morris, Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

Dear Dave,

This continues the series of letters detailing modifications, corrections, errors, unsupported statements, and / or requests for documentation and information concerning the Draft Lake Crescent Management Plan / Environmental Impact Statement. As agreed in the meeting of January 17, if any of the requests for documentation cannot be answered in a rapid and timely manner, please advise me so a request for the information can be submitted under the Freedom of Information Act (FOIA) as appropriate. Where corrections are indicated, please advise me whether you will make the correction or not. Where modifications are suggested, please advise me whether you will change the plan to reflect the suggested modification. We, the Friends of Lake Crescent (FLOC), desire to assist Olympic National Park (ONP) in the process of improving and refining the plan by systematically identifying all areas where questions of accuracy or appropriateness exist.

Page 58, Air Quality, paragraph 2:

116 Conflicting statements are made in reference to backslope necessary to construct trails here when compared with the section on Geology / Soils found on pages 59 and 60. We believe that extensive backslopes will be required in many places along the Spruce Railroad Trail as well as any widening of either the Camp David Jr. road or the East Beach Road. This entire paragraph deals primarily not with Air Quality but with geology and soil disturbance and therefore should be in a different section with air quality considerations listed separately. The conflicts must be resolved.

Page 59, Water Resources:

117 We object to extensive paving not only for the potential of hydrocarbon runoff, but for the cumulative effect of altering the natural hydrology. This is particularly true in the Barnes Point

117 area at Lake Crescent Lodge. Thus far, ONP has not provided any catchment device to separate oil and water runoff from any paved parking lot around Lake Crescent even though the technology has existed for decades. We feel that not enough importance is attached to the adverse effects resulting from the footprint of the multi-use facility at Lake Crescent Lodge. This facility is especially troublesome when one considers the cumulative effects of all the recommended improvements and construction.

Page 59 and 60, Geology / Soils:

118 We disagree that the cumulative effect of all the proposed projects will be insignificant. The estimate of 3-4 acres is grossly low! The effect of a waterproof surface (7 feet by 13.8 miles) of the upgraded Spruce Railroad Trail would amount to 11.7 acres alone. The amount of area required to achieve a stable backslope will be considerable and be in addition to the 11.7 acres. We therefore oppose the inclusion of the multi-use building in any recommended alternative since it would not enhance safe passage around the Lake and would cause harm to the environment in addition to the destruction of forest habitat.

Page 60 and 61, Vegetation:

119 Once again the study grossly understates the amount of area included in the footprint of the upgraded Spruce Railroad Trail. The estimate given of less than 1 acre is woefully low. The effect of cutting pristine forest on Barnes Point to expand Lake Crescent Lodge is ignored and must be carefully considered in any final plan.

Closing La Poel is an unsatisfactory alternative contrary to the purpose of national parks. Any additional effects of camping over day use can easily be mitigated by planning and layout and reopening facilities closed by administrative decision. Opening sites along the Spruce Railroad Trail only moves any problem to another less manageable area. Not a smart idea!

Once again no positive and permanent steps are proposed or even considered for fire protection to mitigate the vastly increased fire hazard from upgrading the Spruce Railroad Trail. A permanent hydrant system must be considered. Some discussion of fire, the probability of it occurring and the protective measures to minimize loss of life, property and park resources is appropriate. Like safety, its inclusion is mandatory.

The extensive demolition and construction proposed in the Log Cabin area will do irreparable damage to the environment, destroy historic cabins, exacerbate the runoff problem, and unacceptably increase the risk of erosion into the Lake (whose waters are a WSDOE standard).

The effects of this project are not adequately addressed in this draft plan.

The increased use of the buoyed swimming area at Bovee's meadow will cause irreparable harm to the rare plants growing there and should not occur. Do not create a buoyed swimming area here since an adequate number of such areas already exist in other areas of the Lake.

Page 61 and 62, Wildlife:

120 The effects on wildlife by the increase in capacity of Lake Crescent Lodge and the construction of the multi-use building have not been adequately studied. Not only will harm result during the construction phase but become permanent during the operation phase of these facilities.

Page 62 and 63, Effects on Cultural Resources:

121 Any changes to the current configuration of Log Cabin Resort would irreparably destroy important cultural resources. No survey can mitigate this. Even recreation of structures means irrevocable loss.

We take issue with the impact water recreation has on the cultural landscape. Water recreation and use is historically accurate and any statement that says or implies that current use of motorboats and personal watercraft is unrestricted is totally false given the published regulations both local and National Park Service wide. Both of these resorts were historically places of congregation, recreation, and merriment. They were never silent and devoid of recreational use. This is the myth Olympic Park Institute only wishes were true.

Pages 63 and 64, Effects on Administration:

122 Any significant increase in facilities such as the increase in Lodge capacity, creation of remote camping facilities along the Spruce Railroad Trail and the multi-use facility will strain already slim park resources. The plan does not address this problem in adequate detail given the extensive comments and complaints aired by ONP relative to funding both present and expected future. Use of existing facilities near improved roads means quicker response by ONP personnel in emergencies and requires a lower overall number of personnel be committed to this task.

Pages 64 and 65, Effects on Visitor Use / Experience:

123 The plan does not adequately consider the historic and present use of the multitude of lake surface recreational users. Certainly they will be effected in the long term. The conclusion is erroneous in that the majority of visitor expectations are not considered in the haste to justify ignoring the historic uses of the Lake and convert it into a wilderness area when one neither exists nor is authorized under law. It is obvious no serious consideration was given to any effect contrary to those supporting the conclusion.

Page 64 and 65, Effects on Low Income and Minority Populations:

124 From the remarks it is obvious no consideration has been given to Americans of limited and modest means when fee increases and destruction of overnight camping and RV use sites is contemplated. Their elimination denies these Americans an opportunity to enjoy the Lake. No

study of income levels of visitors has been made.

Pages 66 and 67:

The effects of no action on the shoreline completely ignore the seasonal rise and fall in water level and the storms that periodically occur in both winter and summer. These things reduce the impact of man to statistical insignificance in most places.

125 The comments on noise generated by motorized boats and personal water craft completely ignores the federal noise abatement standards in the CFR and the EPA and industry standards currently in effect of scheduled to take effect shortly. It is totally false that increased noise will occur, in fact decreased noise can more reasonable be expected.

The comment on the dangers inherent in operation of personal watercraft shows complete ignorance of their operation and ignores the issue of operator responsibility. If this made any rational sense and was legally sufficient, we would ticket cars and boats, not their operators.

I request this and all previous letters and communications related to the Draft Lake Crescent Management Plan / Environmental Impact Statement be made a part of the official and permanent record relating to the development and approval of this EIS. Please notify me personally if for any reason you feel you are unable to include this document and my comments and the previous documents and comments in this series in the official Lake Crescent Management Plan/EIS record.

I look forward to hearing from you with answers to the questions and comments contained herein.

Yours very truly,

Larry

Lawrence L. Stetson
President, Friends of Lake Crescent

Colonel Lawrence L. Stetson, Retired
Friends of Lake Crescent

March 17, 1997

Mr. David Morris, Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

Dear Dave,

This continues the series of letters detailing modifications, corrections, errors, unsupported statements, and / or requests for documentation and information concerning the Draft Lake Crescent Management Plan / Environmental Impact Statement. As agreed in the meeting of January 17, if any of the requests for documentation cannot be answered in a rapid and timely manner, please advise me so a request for the information can be submitted under the Freedom of Information Act (FOIA) as appropriate. Where corrections are indicated, please advise me whether you will make the correction or not. Where modifications are suggested, please advise me whether you will change the plan to reflect the suggested modification. We, the Friends of Lake Crescent (FLOC), desire to assist Olympic National Park (ONP) in the process of improving and refining the plan by systematically identifying all areas where questions of accuracy or appropriateness exist.

Page 20:

126 What locations will trails connect?

Beach litter has been solved by the ONP policy "Pick it up; Pack it out" according to ONP management on October 28, 1996.

Page 21:

127 We are concerned with the proclivity to build more, spend more money, get bigger, etc. that seems to manifest itself here with the proposal to construct more administration buildings. Federal budgets and national park budgets are getting smaller not bigger and the sooner we recognize and accept this fact, the sooner we can make realistic plans. Planning should be based on what is likely to occur, not what we wish would occur.

Creation of large signs, boundary or otherwise is inconsistent with the federal highway

beautification policy, the ambience of the scenic view, and safety of road users on what is described as a dangerous stretch of highway. It is also inconsistent with NEPA.

Page 22:

128 No evidence exists to support the general statement: "existing ambience may be jeopardized by the increased numbers and resulting noise from motorized watercraft such as high speed power boats and PWCs." The statement is opinion and has no place in this analysis. It must be removed. The statement indicates ONP intends to ban all motorized craft in the future. Is this true?

The discussion of zoning PWC's here conflicts with the program elements in the Appendix. The conflict must be fixed.

Page 23:

129 There is no evidence to support the assertion that swimmers at Bovee's Meadow who stay landward of existing buoys marking the no-wake zone are in any danger. This is opinion and has no place in the analysis unless it is supported by evidence.

Page 24:

130 In the discussion of day use of the lake front at Log Cabin, the seasonal rise of the water level is not considered. The reshaping of the shoreline from natural causes is far greater than from manmade causes. The whole line of discussion must be eliminated.

Page 26:

131 The discussion of the tour boat *Storm King* must be rewritten since it is no longer located on the Lake.

Page 29:

132 The "trend toward more intense use of the lake itself by an increasing number of visitors" is not borne out by the facts. See ONP quarterly newsletter. Lake use is going down and likely will continue because of the economic conditions.

Page 70:

133 I disagree that improvement of boat launch facilities would result in increased risk of fuel spills. More facilities will not necessarily lead to more boats. More facilities relieve congestion and more evenly distribute the number of boats using the Lake. In fact the only spill of recent memory occurred under ONP supervision during refueling of the *Storm King* in 1995. Did ONP report this spill as required? The stain from the spill was still visible on the dock in 1996. The only spill of note in the parking lot and roadways of the Barnes Point launch ramp occurred as a

133 result of a massive hydraulic leak from an ONP mowing machine. The stains were still visible in 1996. Increased parking for boat trailers and tow vehicles will not increase the number of boats, it will provide environmentally benign parking for existing vehicles on those few high use days. No data exists to connect increased boating with more parking.

Page 71:

134 I object to the assertion that continued erosion and compaction of the soils along the shoreline can be totally associated with the human use of the Lake given the violent winter and summer storms and the seasonal increase in Lake level. Nowhere does the plan present any factual evidence to support this statement.

Page 72:

135 I cannot agree with you this alternative would cause "visual scars from previous construction to be reopened." Any damage to the vegetation would come from future construction and will be only very temporary in this lowland forest (see page 42). "Converting a section of the natural lakeshore to recreational development" is an inaccurate statement. The operative word is not convert but return in the case of La Poel. I am troubled by the reoccurrence of words like *natural shoreline* and *natural vegetative processes* in the draft plan. These imply that ONP intends to treat Lake Crescent as a wilderness area which it is not. If fact it is more closely a recreation area. I request a clear statement of true ONP intentions for Lake Crescent.

Page 73:

136 Rare plants are mentioned her and on the preceding page. Are these plants threatened or endangered in any way? Don't they occur in many other locations?

Page 76:

137 I am troubled by the implication of adverse effects on park workload required to keep the Lake for the use and enjoyment of the people. It implies an underlying trend to deny the American citizen the opportunity to experience nature and use the Lake except in only the most minor sense by being forced to remain on the outside looking in but unable to actually enter. Again, a clear statement of the long range intent of ONP with regard to the use of Lake Crescent is in order to dispel these contradictions.

Page 81:

138 Again we see words such as "likely" which are conjecture and not fact. They must be excised from the document where ever they occur and cannot be supported by data.

Page 85:

139 While the Olympic National Park has an ongoing relationship with the Friends of Lake Crescent and we do meet biannually, we in no way endorse the draft Lake Crescent Plan / Environmental Impact Statement. The plan was not discussed in any of our meetings and was generally specifically eliminated from discussion. You inclusion of this statement implies acceptance of the plan and park intentions and objectives by the Friends of Lake Crescent. While we encourage dialog with ONP and intend to work closely with ONP on the Lake Crescent Management Plan / EIS, the implication that we agree with and support the ONP alternative, intentions and objectives is false and misleading. It should be clarified and corrected.

140 ONP lists a number of individual consulted in plan development. Our investigation shows little or no involvement with actual plan development. The individuals listed on page 85 were only involved in the Spruce Railroad Trail upgrade, not the entire plan. Again their inclusion as if they actually played a part is erroneous and misleading.

Page 86:

141 I cannot comment on the contributions of the individuals listed here since ONP has refused to provide any record of their consultations. Given the contents and tone of the draft plan, one suspects the environmental organization and the Native American tribes provided more elaborate and voluminous contributions than those individuals listed on the previous page.

Page 87:

142 ONP and the NPS has refused to provide the professional credentials of the preparers so it is impossible to comment on their qualifications to prepare and analysis. Similarly, ONP has refused to provide any data on the University of Washington students.

General Remarks on the Draft as a Whole:

We find the draft very disturbing from a variety of aspects. The total numbers of the errors in fact as staggering. The innuendo is slanted against the citizen in his and her attempt to use and enjoy this historical recreation site. The alternatives are shallow and reflect only an attempt to portray the preferred alternative in the best possible light. The discussion of the effects of the various alternatives similarly seems to be written to justify a preselected alternative. The draft document is lacking in all but the most rudimentary documentation. The effects of fire and its prevention are not discussed in adequate detail. There is an underlying tone that seeks to justify the expansion of ONP in budget, staff, and facilities when this is neither likely nor supported by facts and data. We object to the implication that exclusion of man is the only way to protect the Lake and its surrounding environment. Lack of foresight and thoughtful, careful decisions can never justify exclusion of the general population from public lands. We object to

the assertion that overuse, heavy use and increased future use make the plan necessary. The plan may be desirable, appropriate, and even necessary, but not for these reasons. They are false. We object to the tone that implies the Lake is not big enough for all and therefor only a privileged class of a certain user is appropriate. We seek to protect the rights of ALL to use and enjoy the lake. The NEPA requirement to involve the citizens and local government has not been met. In fact, the plan was conceived and developed in secrecy. We object to the Olympic National Park not taking formal testimony in their attempt to involve citizens. We object to the refusal of Olympic National Park to prepare another draft document, one free of errors and omissions, well documented and unbiased before moving toward a final plan since the final plan, assuming errors and omissions are corrected, will bear only very superficial resemblance to the draft released for public comment.

I request this and all previous letters and communications related to the Draft Lake Crescent Management Plan / Environmental Impact Statement be made a part of the official and permanent record relating to the development and approval of this EIS. Please notify me personally if for any reason you feel you are unable to include this document and my comments and the previous documents and comments in this series in the official Lake Crescent Management Plan/EIS record.

I look forward to hearing from you with answers to the questions and comments contained herein.

Yours very truly,

Larry

Lawrence L. Stetson
President, Friends of Lake Crescent



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OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

March 14, 1997

Superintendent David Morris
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

Dear Mr. Morris:

Friends of the Earth (FoE) is a national environmental advocacy organization dedicated to protecting the planet from environmental degradation and empowering citizens to have an influential voice in decisions affecting the quality of their environment. Our regional field office in Seattle focuses on issues of specific importance to the Pacific Northwest. This letter is to provide comment on the Lake Crescent Draft Management Plan and Environmental Impact Statement (DEIS).

The preferred alternative does include some very good recommendations, such as moving park areas and campsites away from the shoreline, developing Spruce Railroad trail into a bicycling trail and improving visitor information and interpretive services. Furthermore, we commend the National Park Service for appropriately singling out and separating personal water craft (PWC) use from that of conventional boats.

However, FoE cannot support the National Park Services's preferred alternative, Alternative "A", as it is presented in the DEIS. We have serious objections to the water recreation section of the preferred alternative. It is troublesome that this section allows the continued use of PWCs. The DEIS fails to address the critical environmental impacts of PWCs to the ecosystem and overall visitor and residential satisfaction of Olympic National Park. PWCs are very disruptive to those who want to enjoy Lake Crescent's peaceful and scenic surroundings. PWCs are dangerous recreational vehicles which destroy shoreline habitat because of their speed and inherent water-jet propulsion. PWCs are wholly and totally inappropriate for use in our National Park.

We request that you take the following actions:

- Ban personal watercraft (PWCs) from Lake Crescent and all waterways of Olympic National Park.
- Set a maximum speed limit of 35mph for other water crafts, as well as ban all excessively noisy boats.

SPECIFIC COMMENTS

Allowing personal water craft in Lake Crescent conflicts with many statements of the NPS in the DEIS, and also conflicts with the stated Management Objectives of the NPS for Lake Crescent. FoE notes the following inconsistencies:

Page 8

Personal Water Craft (PWCs) create noise and safety hazards for other lake users in this confined area.

Page 9

The use of personal water craft (PWCs) in the area has resulted in conflicts, not only with day users, but nearby residents. Noise generated by these water craft disturb the serenity of the lake for many visitors and creates potential safety hazards for PWCS operators, other boaters, and swimmers.

Page 18

In the past few years, several complaints about noise and disruption of scenic and historic resources by jet boats and personal water craft has been expressed to park management. In the absence of any limitations to use of the lake, the potential for decreased safety and increased conflicts between different users is great. Attendant increases in noise levels may also detract from the visitor experience.

Increased recreational use of the lake has implications for park operations. At the present time, the Park does not have funding to provide additional staff or boats to monitor use of the lake.

Page 19 - Management Objectives:

- 1) Protect the pristine quality of the water and lake ecology of Lake Crescent.
- 2) Provide opportunities for a variety of outdoor experiences and recreation uses which minimize conflicts between recreational users, and are compatible with the protection of park resources and value.
- 4) Protect critical spawning and rearing areas in the watershed which are used by the lake's unique fish species, and maintain natural terrestrial and aquatic processes upon which they depend.
- 9) Provide for the continued use of private property within the Lake Crescent watershed while minimizing the impacts and effects of private development on the visitor experience, lake ecology, scenic and visual quality, and the historic setting.

Page 22 Alternative A

Lake Crescent is a popular site for a variety of recreational opportunities and the existing ambiance may be jeopardized by the increased numbers and resulting noise from motorized water craft such as high speed powerboats and PWCs.

The DEIS is woefully inadequate in scientific analysis of the impacts of Personal Water Craft on the Lake Crescent environment. In Sections of The Affected Environment (pages 39-57) and Environmental Effects of Alternative A, (pages 58-65), there is no analysis of impacts of PWCs or unregulated conventional boating use on the ecosystem of the lake. There is also no decibel readings to document the actual noise disturbance they cause. In fact, there is no base-line data of environmental impacts of the alternatives in the DEIS. This is unacceptable for determining impacts of an activity on the environment in our national parks.

4

The DEIS also does not address how PWCs would access the proposed zoned area without violating their boundaries (particularly in the case of lakefront landowners who may live a considerable distance from the zoned areas). The DEIS also does not address how the National Park Service will enforce the proposed zoned areas.

CONCLUSION

We stress the point that the National Park Service has the existing authority to regulate, restrict, and/or ban personal water craft use. We expect that the National Park Service will exercise their authority for the good of the American public and taxpayers, and not let a small private-interested group benefit at the expense of the environment and the enjoyment of all visitors. The National Park Service has banned PWCs use in Everglades National Park and Yellowstone National Park. Severe restrictions and/or bans are currently being considered at Glacier, Grand Canyon and Big Bend National Parks. In January 1997, The NPS banned PWCs in Voyager's National Park.

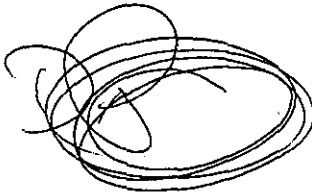
Also, the NPS recommendation for a 50 mph speed limit for motor boats is unacceptable. We believe to preserve the National Park experience, and the unique quality of Lake Crescent, that the allowed speed limit be no more than 35 mph. This makes the issue of horsepower irrelevant; regardless of the size of engine, everyone is bound by the same speed. That is the only way to provide a peaceful, safe and serene National Park setting for visitors.

Olympic National Park is a national asset, owned by everyone in the United States. Though a small number of residents say they need PWCs for transportation, other modes of transportation are readily available, such as using other boats and/or using the roads.

Thank you for considering our views. Please contact me at 206/633-1661 if you have any questions regarding these comments

Sincerely,

Thomas D. Potter
Policy Associate





HELLS CANYON PRESERVATION COUNCIL

POST OFFICE BOX 908
JOSEPH, OREGON 97846
PHONE 683-432-9100
FAX 603-432-9061

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OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

Mr. Dave Morris, Superintendent
Olympic National Park
600 East Park Ave.
Port Angeles, WA 98362

January 28, 1997

Dear Superintendent Morris:

Please accept these comments on your Draft Environmental Impact Statement (DEIS) for the Lake Crescent Management Plan. Thank you for the opportunity to comment.

Be advised that the Hells Canyon Preservation Council could (and would publicly) support Alternative A only if changes are made that would:

- (a) ban the use of jet skis (euphemistically known as "personal watercraft") anywhere in Olympic National Park;
- (b) regulate existing motorized use of Lake Crescent; and
- (c) eliminate the provision for construction of conference center facilities at Lake Crescent Lodge.

We submit these comments on behalf of our 2,200 members who support strict regulation and limitation of motorized uses on public lands. The Hells Canyon Preservation Council is an advocate for protection of the ecological integrity of public lands and has supported addition of the Hells Canyon Ecosystem to the National Park System, to be managed by the National Park Service.

Jet Skis

As you may know, the Hells Canyon Preservation Council has been deeply involved in the issue of jet ski and jet boat use of the Snake Wild and Scenic River within the Hells Canyon National Recreation Area. In its proposed new Snake River Recreation Management Plan, the Forest Service saw fit to recognize a State of Oregon ban on the use of jet skis on free-flowing waterways. The Forest Service has banned all use of such craft on the Snake River in its plan.

Obviously, the use of these craft on a lake is a different issue than their use on a free-flowing river. However, we strongly urge you to consider the following information from the Oregon State Marine Board (OSMB), which clearly indicates an escalation in jet ski-related accidents (wherein there were injuries or substantial property damage) and fatalities as the use of this type of craft increased:

- There were a total of only three accidents involving jet skis in Oregon between 1980 and 1986.
- There were three jet ski accidents in 1987.
- In 1988, there were ten accidents and **one** fatality.
- There were ten accidents in 1989.
- In 1990, the OSMB enacted regulations governing the use of jet skis. Yet still in that year, there were seven accidents and **one** fatality.
- In 1991 there were eight accidents.
- In 1992, there were 14 accidents and **two** fatalities.

These accidents and deaths occurred on flat waters, not wild rivers. We have not acquired the records for the State of Washington, but the point remains the same. The question is simply, do you wish for Olympic National Park to become a playground for these dangerous and disruptive craft? Are there not sufficient other lakes and reservoirs in the general vicinity, which are not mandated to be treated as national treasures and where fewer conflicts exist, where the people who seek to engage in this activity can be accommodated?

As well, we wonder if the Park Service will feel compelled to open the doors of our National Park System to any and all other destructive forms of motorized recreation (that exist, or might be invented in the future) that seek to expand the territory of their influence. Frankly, we would be surprised and highly concerned if the Park Service caved in to the jet ski interests, when the Forest Service saw fit to say no to jet skis in order to protect traditional forms of recreation and to protect the land and waters under its jurisdiction.

We strongly urge you to reconsider direction in your DEIS that would allow jet ski use. We hope you and your staff recognize the full implications of such a decision, and problems you are opening the door to by opening the Park to this kind of high-impact use.

Regulation of Motorized Craft

2 The time to regulate high-impact, motorized uses is before they become a major problem. That way, management is anticipatory and not just reactive, kicking in before problems materialize. As well, regulation is then expected, the public is used to it, and expectations of unregulated use are not established. We strongly urge you

2 to revise the Lake Crescent Plan to impose speed limits on all motorized boats, establish no-wake zones, and impose decibel limits for all craft as a condition of motorized use of the lake.

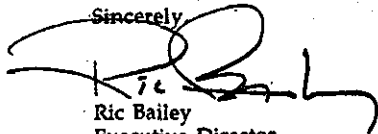
Lodge Development

The place that modern development should be directed, as indicated in National Park Service regulations, is in surrounding communities, not within the park. This protects the park from over-use, encourages economic development in the communities, and fosters better relations with the communities because the Park Service and its concessionaires are not seen as business competitors.

Although it might not pose a significant impact to those relations, or to the integrity of the park or the lodge to proceed with a modest expansion of existing facilities, we do not see the wisdom of, or need for constructing conference center facilities, which are abundant in Port Angeles.

In closing, we again appreciate the opportunity to comment, and your serious consideration of our concerns. Please send us a copy of the Record of Decision for the Final EIS for the Lake Crescent Management Plan upon its release.

Sincerely,



Ric Bailey
Executive Director

**Inland Northwest
WILDLIFE
COUNCIL**



January 29, 1997

Mr. Dave Morris, Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

Dear Superintendent Morris,

I am writing regarding the issue of personal watercraft use on Lake Crescent and any other waterways in the Olympic National Park.

The Inland Northwest Wildlife Council is a volunteer organization of 1,000 plus members whose work includes the support of the natural resources of our nation, the hunting and fishing heritage that we struggle to maintain and the preservation of our national parks for their use as natural places to be enjoyed in a natural state.

The notion of allowing personal watercraft on the waterways of any national park with their inherent noise is of great concern to us. The impact they have on fish and wildlife is inappropriate. Their ability to access shallow areas where fish may reside and where wildlife is more likely to be found is ample reason to be concerned.

We encourage you to refuse to permit the use of these machines on our public waterways. In addition to the problems identified above, the precedent that would be set is unacceptable.

Thank you for considering our views.

Sincerely,

Bob

Robert D. Panther
Executive Director
RDP:tp

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1239 East Warner Ave.
Santa Ana, CA 92705
(714) 751-4277
FAX (714) 751-8418

228

November 4, 1996

David K. Morris
Park Superintendent
Olympia National Park
600 East Park Avenue
Port Angeles, WA 98362

Dear Mr. Morris:

On behalf of the more than 350 Lake Crescent-area members of the International Jet Sports Boating Association (IJSBA), I am writing in support of the Lake Crescent Area Management Plan Alternative "A."

The IJSBA is the world's largest membership organization of personal watercraft (PWC) enthusiasts. Our members share the concerns of many other outdoor recreational enthusiasts about the growing number of boats on the water. We want to support reasonable, common-sense solutions to the issues we face on the public waterways.

Of the options addressing PWC use in Alternative "A," we are wholeheartedly in support of Option 3. Mandating idle-speed operation in near-shore areas and expanding no-wake areas near public use areas and sensitive habitat areas enhances the safety and natural beauty of all of our public waterways, including Lake Crescent. These strategies are an effective deterrent to use conflicts that allow everyone to enjoy the lake.

We do not support any proposals that segregate or ban the use of any officially U.S. Coast Guard certified vessel, including personal watercraft. It is our strong belief that all boats must be treated equally by allowing equal access to public waterways and uniform enforcement of all local, state and federal boating rules.

Thank you for your consideration of all points-of-view on this important issue. Please add our association to your mailing list regarding any future action or consideration of the management plan.

Best Regards,

Mark Denny
Government Affairs Supervisor

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1st Vice President

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Recording Secretary

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Robert D. Panther

6118 N. Market Street

Spokane, WA 99207

(509) 487-8552

FAX (509) 487-8564

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OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

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Klahhane Club
P. O. Box 494

Port Angeles WA 98362

October 26, 1996

David Morris, Superintendent
Olympic National Park
600 E Park Ave.
Port Angeles WA 98362

Dear Mr. Morris .

In response to your call for comments on the Lake Crescent draft Management Plan, the Klahhane Club has voted to comment on the question of personal watercraft (PWC).

Klahhane is a local hiking club making extensive use of the park's trails, including the Spruce Railroad Trail along the shore of Lake Crescent.

The wish of the majority is that personal watercraft be prohibited in the Park. There is concern that the noise made by PWC is an inappropriate and unwelcome intrusion in the quiet of that beautiful lake.

Sincerely,

Klahhane Club/EB

The Klahhane Club
by Emilia Belserene, Corresponding Sec'y

cc:

Bud McCall, President
Carolyn Morillo, Recording Secretary



**MOUNT RAINIER NATIONAL
PARK ASSOCIATES**

27

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December 10, 1996

David Morris
Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98382

Subject: Comments on the Draft Lake Crescent Management Plan

Dear Superintendent Morris:

Mount Rainier National Park Associates (MRNPA) is an organization whose purpose is to promote the protection and preservation of Mount Rainier National Park. With this purpose, MRNPA is also concerned about the management decisions made and actions taken in other national parks as these may establish precedents that may then be applied to Mount Rainier National Park. Accordingly MRNPA opposes the portion of the Draft Lake Crescent Management Plan that allows personal water craft operation on Lake Crescent. We feel to allow the use of personal water craft within Olympic National Park is incompatible with the philosophy of national parks and would set a bad precedent that could then be applied to Mount Rainier National Park as well as other national parks.

The 1916 National Park Service Organic Act required that the National Park Service (NPS)

"promote and regulate the use of ... national parks ... as to conform to the fundamental purpose ... which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same ... " etc.


From this wording it is clear that providing for the enjoyment of national parks is to be promoted by the NPS, but it is also clear that the enjoyment is to be based upon the scenery, natural and historic objects, and the wild life of the park. A large portion of the appeal of personal water craft is in the high speed they can attain, their maneuverability and their almost unsinkable design. Too many personal water craft operators recreate by exploiting these capabilities to the utmost without regard for their surroundings or the annoyance and disruption they cause to people or wild life near them. Allowing this disruptive, machine based recreation at Lake Crescent is not consistent with the NPS's mandate to conserve and to provide enjoyment of the

scenery, natural and historic objects, and the wild life within Olympic National Park. Numerous other bodies of water are available where personal water craft use is allowed and acceptable. The use of personal water craft should not be allowed on Lake Crescent.

MRNPA is also concerned about the precedents that allowing personal water craft to operate on Lake Crescent may establish. In concept as transportation vehicles, personal water craft are not too different from snowmobiles and mountain bikes. If personal water craft are allowed to operate on Lake Crescent, why not snowmobiles at Hurricane Ridge or mountain bikes on the Hoh River Trail? Snowmobiles already pose a significant problem at Yellowstone National Park. What problems will personal water craft create at Olympic National Park? Once the precedent is established that personal water craft are allowed on Lake Crescent, it will be difficult to impossible to remove them should problems develop. Similarly the precedent will be established that Olympic National Park accepts mechanized recreation devices. Demands to allow other forms of mechanized transportation will surely follow.

In summary, Mount Rainier National Park Associates opposes the use of personal water craft on Lake Crescent and is concerned that allowing the use of personal water craft will set a bad precedent that may be applied to other national parks in the future.

Very truly yours,


John A. Titland
President
15242 S. E. 48th Drive
Bellevue, WA 98006

Maintain Restore Nurture Protect and Appreciate

NATIONAL
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MANUFACTURERS
ASSOCIATION

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January 28, 1997

Mr. David Morris, Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

Dear Mr. Morris:

As you may know, the National Marine Manufacturers Association represents companies manufacturing boats, engines and related products throughout the United States. Our members manufacturer over 80 percent of these products for boating enthusiasts in this country and we are deeply involved in promoting boating as a family lifestyle.

We know that you are presently analyzing boat use, and particularly personal watercraft, on Lake Crescent and we are most concerned that one of the options being promoted is a ban on personal watercraft. As I am sure you are aware, personal watercraft are, without question, the most visible of all boats currently in use...not only in sales but in media attention...and all too often they are unfairly singled out as the target for those who would like to dictate the use of public waterways.

Last year NMMA participated in the development of *A Guide for Multiple Use Waterway Management* by the National Water Safety Congress and we recommend this guideline as you review potential use conflicts on Lake Crescent. Further, we participated in the recent meeting in Orlando, Florida of the Partners Outdoors where seven major federal agencies came together to address use of federal lands and water...and how to make them more accessible to recreational use while preserving the integrity of the environment... a philosophy NMMA wholeheartedly supports. And, we have been active participants in the *Recreational Lakes Initiative* which was created by Congress and will open over 2000 manmade lakes to public/private partnerships to further recreational opportunities. I mention these activities to illustrate that we take boating and how we can positively interact these recreational activities with the goals of park managers. In our minds, a ban on personal watercraft or any other vessel is not the way to properly manage recreational use or access to public waters.

It is our hope that you will, in your deliberations, rule out any proposed ban of personal watercraft and work with the industry in implementing our model operator regulations to solve any real or perceived problems on Lake Crescent. Should you need further

information on what the personal watercraft industry is doing to be more compatible with other waterway users or residents please don't hesitate to call me. We look forward to working with you.

Sincerely,

Mick Blackistone, Vice President
Government Relations

cc: Veer Beri, US Marine
Roy Montgomery, Mercury Marine
Marlena Cannon, OMC
Hank Sitko, NWMTA
Jan Plessner, PWIA
Karen Cipowski, PWIA
Jeff Napier, NABM



National Parks
and Conservation Association

PACIFIC NORTHWEST REGIONAL OFFICE

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PORT ANGELES, WA 98362

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PHIL PEARL
Director

November 20, 1996

Dave Morris
Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362-6757

RE: Lake Crescent Management Plan DEIS

Dear Dave:

Thank you for the opportunity to comment on the Draft Environmental Impact Statement (DEIS) for the Lake Crescent Management Plan. NPCA's general comments follow. Noteworthy is that we may submit additional written comments before the February 3, 1996 deadline.

Introduction

NPCA generally supports the management objectives outlined in the DEIS' preferred Alternative A. We support the proposed efforts to protect the lake by moving all parking, campsites and developed areas away from the lake shoreline. We also support the proposed efforts to improve visitor information and interpretation.

However, we are very concerned about three general components of the preferred Alternative A: 1) the proposal to allow personal watercraft (PWC) to operate within specific zones of the lake; 2) the absence of maximum boat speed and noise restrictions; and 3) the potential expansion of Lake Crescent Lodge to accommodate conference center facilities.

In the following pages we will elaborate on each of these concerns.



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1. Proposal to Allow PWCs to Operate Within Specific Zones of the Lake

NPCA does not oppose the continued use of conventional boats on Lake Crescent, provided they are operated at safe, reasonable speeds and do not negatively impact fish, wildlife or the passive recreational uses enjoyed by the majority of park visitors. However, and as we will more fully explain below, we strongly oppose PWC use on Lake Crescent or, for that matter, anywhere within the boundaries of Olympic National Park. As such, we also object to the various proposals to zone PWC use to a portion of the lake.

It is our contention that PWCs are fundamentally different from conventional boats in terms of design and use and are in most cases operated in conflict with the more passive recreational activities people expect to find in national parks. PWC use is simply inappropriate in a park managed primarily to protect natural, cultural and wilderness resource values. Clearly, there are plenty of alternative places to operate PWCs with less impact.

PWC manufacturers represent PWCs as legitimate Class One motorboats recognized by the United States Coast Guard. Accordingly, they argue that singling-out PWCs, in any way that differs from conventional boats, is arbitrary and capricious. But in the case of our national parks, the formal classification of a PWC is irrelevant. The National Park Service has the legal authority to regulate all types of motorized and boating uses. What is relevant, is that PWCs are designed for and, in almost all cases used, in ways that are inconsistent with the National Park Service's legal mandate to protect natural, cultural and wilderness resource values.

We understand that any decision by the National Park Service to severely restrict or ban PWC use under its existing authority must be reasonable and justified. We address this in the following pages. First, we articulate how PWC design and use differs from that of conventional boats. Second, we articulate why their use is inappropriate for any national park managed primarily to protect natural, cultural and wilderness resource values. Third, we outline the National Park Service's existing mandate and authority to implement a ban. Fourth, we state why the proposed zoning of PWCs is impractical and unenforceable.

• PWCs are fundamentally different from conventional boats in terms of design.

Unlike conventional boats which carry the operators and passengers within a hull, PWCs carry one to three riders that stand, kneel or sit on the craft during operation. They are designed primarily for speed and maneuverability and are therefore lacking in safety features. A typical PWC has a 50 -110 horsepower engine with a water jet propulsion system capable of speeds of up to 70 m.p.h. Unlike conventional propellered craft, PWCs have no brakes or clutches to reverse direction. They are unsteerable without power and are inherently unstable. As a result, operators typically wear swimsuits and/or wetsuits with the expectation of falling off the PWC into the water. For similar reasons, PWCs are designed to withstand full submersion and stop or circle around the "thrown" operator. They are also considered too dangerous to operate at night and therefore are not equipped with running or navigation lights.

Noteworthy, is that the above described design features are apparently *not* taken into account in the United States Coast Guard classification of these watercraft. Accordingly, it may very well be that the Coast Guard classification of PWCs (as Class One motorboats) is arbitrary and capricious.

- PWCs are fundamentally different from conventional boats in terms of use.

PWCs are manufactured and marketed by makers of motorcycles, all-terrain vehicles and snowmobiles. They are aggressively marketed as "thrill" vehicles capable of performing rodeo-like stunts.

Describing the actual PWC use, without over-generalizing, is difficult. Clearly, *there are* responsible and considerate operators. However, the preponderance of operators appear to be so involved in *their* activity, there is total disregard to the detrimental impacts on their surroundings and/or conflicts with more passive user groups. Indeed, if the situation were any different, PWCs would not be so controversial and the PWC industry would not need a cadre of attorneys to preserve access.

PWC operators typically travel in groups of 2 - 5 and confine themselves to a small area where wakes can be repeatedly jumped and tight maneuvers performed. They are rarely used to travel from one destination to another, or to enjoy a favorite fishing or picnicking spot. In this regard, PWCs are typically used as an end-form of recreation - a "sport" - that may have very little or nothing to do with a particular body of water, natural setting or national park.

PWC group size appears to be related to the social nature of the sport. Unlike conventional boats that carry multiple passengers and provide for interaction among passengers in one craft, it appears that socialization among PWC users takes place in multiple craft. In this regard, it is not unlike downhill skiing. Although a downhill skier can certainly enjoy the sport by *him/herself*, there is a tendency to recreate in groups, imitate behavior and engage in friendly stunt-oriented competition.

For what may be similar reasons, there is also a tendency to operate PWCs in places where people on the shoreline or in boats can be impressed with the skill, courage and capabilities of the operator and/or craft. Here again, the PWC operator's concentration and self-absorption often inadvertently, and sometimes intentionally, results in impacts and conflicts.

Finally, unlike conventional boating which tends to be a summer, fair-weather activity, the sport-like nature of PWC use is rapidly evolving into a year-round activity. This has been facilitated, in part, by high tech dry suits and fabrics that can keep an operator warm and dry for hours.

- PWCs are inherently more dangerous than conventional boats.

As mentioned above, PWCs have no brakes or clutches to reverse direction, are unsteerable without power and are inherently unstable. PWCs are also smaller and faster (for their size) than conventional boats. This makes them less visible and provides for less reaction time to obstacles or conflicting traffic. Moreover, PWCs are designed so that *only the operator has forward vision*. Such design characteristics limit the operation vigilance typical of conventional boats (where boat passengers often participate in watching for obstacles or conflicting traffic).

Safety concerns may also be exacerbated by a sole operator who is often distracted by the aggressive, high speed maneuvering typical of PWC use. As a result of this maneuvering, PWC operators often have their vision obstructed by water and/or wind. PWC operators may also be distracted and/or fatigued by the athletic stamina, skill and activity involved.

The tendency for PWCs to operate in groups, as well as their tendency to rapidly change direction and maneuver in unpredictable ways may also contribute to PWC accidents. Collisions with other PWC riders are commonplace. Boater "rules of the road" appear to be non-existent and run contrary to the very design purposes of PWCs.

The inherent dangers suggested above are supported by disproportional accident rates. A 1994 California boating report shows that 13.1% of all registered vessels are PWCs, yet 36% of all boating accidents and 46% of all boating injuries involved PWCs. A boating accident report for the State of Wisconsin reveals similar statistics. Likewise, an August 30, 1995 editorial in USA Today reports that in 1994 there were 3,002 reported accidents, 1,339 injuries and 56 deaths involving PWCs.

- PWCs produce disturbing noise.

PWCs produce noise levels in the range of 85 -105 decibels (dB) per unit. A person standing 100 feet away from one PWC may be exposed to approximately 75 dB which, because of rapid changes in acceleration and direction is perceived to be more disturbing than constant sounds at more than 90 dB. In this regard, it is important to understand that dB levels are logarithmic units, so each 10 dB actually represents a 10 fold increase in sound. Moreover, there is a cumulative noise factor of an additional 3 dB per unit (capped at approximately 15 additional dB) when PWCs recreate in groups and only a 6 dB reduction in noise as distance from PWC operation is doubled. Noteworthy is that the American Hospital Association recommends hearing protection for even occasional sounds above 85 dB.

Although engines of similar horsepower produce similar dBs (i.e. whether they be in conventional boats or PWCs) there is a particularly disturbing quality to the two cycle engine sounds produced by PWCs. PWC engines lack low frequency sound and are recognized and often described by their high pitch, whining. As mentioned above, this whining is exacerbated and perceived to be louder than its actual recordable decibel level as a result of inconsistent and unpredictable acceleration and deceleration.

Given the evidence suggesting just how offensive PWC noise is perceived to be, it appears that the average person cannot process PWC engine noise as a background disturbance often described as "white-noise". In other words, it is not something that anyone but the PWC operator simply "gets use to". Rather, its unpredictable change in pitch appears to elicit an anxious response, almost as though one is trying to anticipate, and protect oneself against the next offensive surge in pitch.

- **PWCs impact wildlife and other natural resources.**

Because of their low draft and internal water jet design characteristics, PWCs are capable of travel into shallow and more remote areas where environmental degradation to water and on-shore resources is likely to be greatest. In this regard, there is mounting evidence that impacts to wildlife may be much more significant than those caused by conventional watercraft. At this point it is not clear whether these increased impacts are the result of one or more of the following factors: physical access to remote areas, speed, noise, tendency to travel in groups, maneuverability and/or confinement to small areas.

Needless to say, it is very difficult to *prove* a causal effect of any recreational use, particularly one that is relatively new. For example, the absence of a nest could have everything or nothing to do with the presence of PWCs. But it is also unrealistic and unconscionable, particularly given the mandate of the National Park Service, to expect proof as a prerequisite to regulation. If anything, the National Park Service should be consistently erring on the side of resource protection.

Throughout the country, wildlife biologists have testified on the real and potential impacts of PWC use. For example, in a recent letter to nearby San Juan County, officials at the Washington State Department of Fish and Wildlife's Ecosystem Management Program have gone on record to report their "increasing concern [of PWCs] on nesting birds and salmon".

Likewise, the United States Fish and Wildlife Service has used existing and potential PWC impacts to wildlife as the primary justification for banning and/or severely restricting PWC use at Key Deer National Wildlife Refuge, Great White Heron National Wildlife Refuge, Key West National Wildlife Refuge and Monterey Bay National Marine Sanctuary. For similar reasons, PWCs are banned in Everglades National Park, Yellowstone National Park and Canada's Waterton National Park (which abuts Glacier National Park). Similar bans are also currently being considered at in Glacier National Park and Big Bend National Park.

- **PWC use and conflicts are likely to increase.**

PWCs were introduced in the mid 1980s, but have only recently caught on. There are now approximately 750,000 PWC registered in the United States with approximately 100,000 new units being sold annually. In 1995, PWCs accounted for 33% of all watercraft sales. Moreover, because PWCs are designed primarily for solo use, it is important to understand that the potential market for PWC sales may be three to four times that of conventional boats.

The salient point is that the number of PWCs is likely to double over the next several years and then continue to grow at a significant rate. To the extent there are known conflicts today, it is not unreasonable to assume that things are likely to get much worse.

In many respects, the situation with PWCs is not unlike the early years of snowmobile use in Yellowstone National Park. In the early 1960's, snowmobile use was recognized, not as a recreational use, but as a legitimate means to access the park's snow covered roads. People who lobbied for such access argued that the total number of snowmobiles would stay small, conflicts would be few and the activity would be relatively benign. Today, more than 150,000 snowmobiles enter the park each winter from West Yellowstone alone - and that number is growing. As a result, there are very serious, unanticipated issues with air quality and noise pollution. There are also very serious, unanticipated conflicts with wildlife and winter recreational use of the park.

- **Some forms of recreation, including PWC use, are simply not appropriate for national park units managed primarily to protect natural, cultural and wilderness resource values.**

As suggested above, PWC use is an end form of recreation that has very little, if anything, to do with the appreciation or interpretation of a national park. By and large, people use PWCs to drive erratically and jump wakes, not to go fishing, access a favorite fishing spot, or appreciate the natural beauty of a park. And, they do so at the expense of the average park visitor - people who come to more passively appreciate the very resources the park was created to protect.

Moreover, the offensive noise and behavior of PWC users is in direct conflict with the National Park Service's obligation to protect natural resources such as natural quiet. People who come to experience a park's cultural resources do so with the expectation of finding peace, quiet and tranquility. They do not expect to have their stay disturbed by the noise and behavior often associated with PWC use.

In other words, given the mandate of the National Park Service, including the existence of authorizing legislation that clearly defines the values a particular park was created to protect, it is not unreasonable, arbitrary or capricious for a land manager to make absolute determinations, or distinguish between seemingly similar uses, when deciding on the *appropriateness* of certain recreational activities. Indeed, this is one of the land manager's primary responsibilities.

Moreover, it is the mandate and responsibility of the National Park Service consistently err on the side of resource protection. In this regard, the land manager need not *prove* that a restricted or banned use has potential or a real negative impact. Rather, it is up to the user group to prove that the new recreational activity has *no* negative impact. Only then should such use be considered.

- The National Park Service has a mandate and the existing authority to regulate or ban PWC use.

The National Park Service's existing authority to regulate PWC use is provided in the following:

Organic Act of 1916 which was created by Congress to "promote and regulate the use of Federal areas known as national parks...[so as to] conserve the scenery and the natural and history objects and the wildlife therein and to provide for the enjoyment of same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations";

Redwoods Act of 1978 which amends the Organic Act of 1916 to unambiguously define resource protection as the primary responsibility of the National Park Service; and

Section 1a-2(h) of 16 US Code which gives the Secretary of Interior the ability to regulate boating in any manner deemed advisable.

Implementation of the above is provided through 36 CFR part 1.5 which addresses activities that are incompatible with preserving wilderness qualities such as serenity and 36 CFR part 3 which deals specifically with certain boating activities.

It is also worth noting that the recent *Bicycle Trails of Marin vs. Secretary of the Interior* case appears to support a land manager's decision to distinguish between various recreational uses and promulgate regulations to address "appropriate" and "inappropriate" uses of national parks, as well as areas within national parks.

- A ban of PWCs in Olympic National Park does not foreclose PWC use in other areas.

It is important to recognize that a ban of PWCs within a park's boundaries does not deny anyone's right to own and operate a PWC. Just as there are appropriate places to recreate with a motorcycle, bicycle, or racing car, there are appropriate places to recreate with a PWC. In this regard, there are numerous nearby lakes and coastal miles along which people can safely, lawfully and unintrusively operate PWCs.

- Cases where the PWC industry has brought suit and overturned restrictions and/or bans are not applicable to national parks.

The National Park Service and other federal agencies have clear authority to restrict or ban PWC use and have effectively done so. Federal agencies are simply required to articulate a reasonable justification for restrictions and/or bans. Challenges claiming that such decisions have been arbitrary and capricious have been successfully defended by the National Park Service and United States Fish and Wildlife Service. Overturned cases like the San Juan County ordinance (which involve county government attempting to supersede state regulations) are simply not applicable to federal jurisdictions.

- Zoning PWCs to a portion of a lake is impractical and unenforceable.

Confining use to a particular area will have a disproportional impact on that area. At this point it is not clear how people living and/or recreating near the proposed PWC zones will react to a concentration of PWCs. Has the National Park Service polled the concessionaires, residents or recreational users of the proposed PWC zones?

Also not clear is what will happen when and if PWC use within a particular zone becomes overcrowded. Will there then be pressure to expand the zone or open up new areas of the lake to PWC use?

Related to this is the question of how practical it is to restrict PWC use to a particular portion of a lake when PWC users may live outside of the permitted PWC use area. In this regard, it is probably unrealistic to require or expect that a lakefront property owner will trailer his/her PWC to the proposed PWC use area.

Finally, in these fiscally constrained times it is unrealistic to believe that funding will be there to designate a full-time park ranger to PWC enforcement. Such a designation may also be an inefficient or inappropriate use of limited park personnel.

2) The Absence of Maximum Boat Speed and Noise Restrictions

For many of the same reasons presented above, NPCA would like to see a maximum boat speed limit and noise level established for the entire lake. The maximum boat speed should be sufficient to allow for established activities such as water skiing, but should be low enough to dissuade and prohibit high performance speed and racing boat activity.

2 It is our understanding that 35 m.p.h. is the upper end of speed necessary to water ski. Reportedly, only very experienced or expert skiers are capable of skiing at faster speeds. Accordingly, we recommend that a maximum speed of 35 m.p.h. be set for the entire lake. Of course, we recognize that there may be occasional use above this speed limit and that it may be impractical to expect strict compliance or enforcement. However, by setting a reasonable maximum speed we may discourage high performance speed and racing boat activity, without impacting existing or established use.

Likewise, we support the National Park Service's establishment of maximum boat noise standards and restrictions. In recent years there has been a proliferation of speed boats that are designed to exhaust above the water line and generate excessive noise. Although, a speed limit will also serve to dissuade and control the use of such boats, we believe that noise standards and restrictions should be established.

3) The Potential Expansion of Lake Crescent Lodge to Accommodate Conference Center Facilities.

3 NPCA recognizes the Lake Crescent Lodge as a comfortable and appropriately scaled overnight facility for park visitors. We also recognize that some years ago, one of the lodge buildings was removed and the total number of guest rooms was substantially reduced. We are therefore not opposed to a 10% increase in the number of guest rooms, provided the buildings are appropriately sighted and architecturally appealing. We are, however, opposed to expansion of the lodge to accommodate conference center facilities which are neither necessary or appropriate for a national park setting.

The existing lodge already has sufficient facilities to accommodate small meetings and/or conferences. Less than one mile away, the Olympic Park Institute also has a small meeting/conference facility.

Although the construction of a larger conference facility at the Lodge may facilitate a longer season of operation, we do not see enough a clear public benefit. This is particularly true when one considers that organized conferences have a tendency to dominate a facility and/or alienate non-conference guests. They also require disproportionately larger infrastructure such as parking. Such infrastructure expansion is likely to put further limitations on the public use of Barnes Point.

Finally, there are already several Olympic Peninsula hotels with conference center facilities. Ideally, such facilities should be owned and operated by the private sector outside of our national parks.

4) Miscellaneous Abbreviated Comments.

- The plan should include a management objective that specifically addresses the goal of preserving and/or enhancing the quality of the visitor's experience.
- In addition to retaining old growth, the plan should address preservation or riparian habitat.
- The plan should include recommendations to protect sensitive spawning areas at the mouth of Barnes Creek.
- The plan should encourage a preference for concessions to rent non-motorized boats and possibly bicycles to be used on the Spruce Railroad bed.
- The plan should include absolute limits on parking expansion to accommodate power boat trailers.
- The plan should limit the docking of tour boats to existing docks.
- The plan should expand no wake zones.

Summary

NPCA generally supports the management objectives outlined in the DEIS' preferred Alternative A. However, we are very concerned and oppose: 1) the proposal to allow personal watercraft (PWC) to operate within specific zones of the lake; 2) the absence of maximum boat speed and noise restrictions; and 3) the potential expansion of Lake Crescent Lodge to accommodate conference center facilities.

If you have any questions or would like additional information, please do not hesitate to call me at 206/328-7274. Upon your request, I am also happy to provide a bibliography and/or footnotes for the PWC information cited above.

Sincerely,



Phil Pearl
Regional Director

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Thomas O. Skjervold, President
Nisqually Delta Association
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(360)357-3792

March 16, 1997

Dave Morris
Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

Dear Mr Morris,

It has come to my attention that *there is need to make a decision about the future development of the Lake Crescent Management district of the Olympic National Park. As President of the Nisqually Delta Association, (based in Olympia, Washington), I feel a particular need to comment on the deliberations. My organization is directly engaged in the development and management of the Nisqually Delta National Wildlife Refuge and from my experience I can personally relay my impressions of the grief caused by personal watercraft (PWC).*

In our corner of the world, PWCs unfortunately conflict with the wildlife management objectives integral to the Refuge. I know there are concerns about the speed and handling of PWCs and as a kayaker I can relate personal consternation caused by their reckless use. It seems to me however that from the perspective of a manager of multiple-use public resources the biggest concern is really the noise and air pollution which is caused by such activity.

It is important to note that such boats are not subject to the same regulation in terms of noise and air pollution as are cars, (and for that matter lawn mowers). Ironically the gains that have been made in the control of atmospheric pollution automobiles produce has been significantly offset by the unregulated pollution that the boating public is allowed to discharge. Especially given the way sound carries over water, the sound pollution from PWCs is particularly distressing

to those of use who would enjoy less acoustically dynamic forms of outdoor recreation.

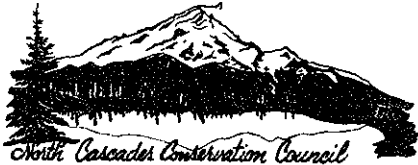
It strikes me that the problem is seeking a reasonable accommodation of those interested in operating PWCs, while attempting to balance that against the desire of those who would rather enjoy the National Parks without the PWCs. Restricting to one end of the lake vehicles which operate without noise regulation is akin to leaving those interested in quieter pursuits with "half a baby". Rather than try to make the unregulated noise and air pollution acceptable by limiting the area of allowable operation, a better approach may well be to insist that the boats used on Lake Crescent comply to reasonable pollution control standards.

I hope these thoughts are of some value to you as you continue your deliberations on this difficult problem. If I can be of any further assistance to you in the settlement of these issues, please do not hesitate to call.

Sincerely,



Thomas O. Skjervold



North Cascades Conservation Council

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Seattle, Washington 98145-1980

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NCCC / Morris

Parks were never intended to become the recreational circuses they would be if the noisy intrusion of PWC were allowed. Similarly, though Ross Lake and Lake Chelan are in Congressionally designated National Recreation Areas they are specifically managed under the NPS principles and guidelines applied to the contiguous North Cascades National Park.

The North Cascades Conservation Council appreciates this opportunity to comment on the subject Draft EA and sincerely hopes that you will have the courage and conviction to "bite the bullet" on this controversial issue of PWC and say "not in my Park"!

Yours sincerely,

Patrick D. Goldsworthy
Chairman of the Board
North Cascades Conservation Council

cc: Superintendent North Cascades National Park

Dave Morris
Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, Washington 98362

RE: DRAFT LAKE CRESENT MANAGEMENT PLAN/ EIS

Dear Superintendent Morris:

The North Cascades Conservation Council has spent 40 years (formed in 1957 as a non-profit , volunteer , citizen's conservation organization) working ceaselessly and diligently to protect and preserve the North Cascades' scenic, scientific, recreational, educational, wildlife, and wilderness vlaues.

While the NCCC, thus, is not directly concerned with Olympic National Park management issues there is one feature presented in Alternative "A" (NPS Preferred Alternative), Alternative "B", and Alternative "C" of the subject EA which would have an indirect and precedent- setting detrimental impact on management decisions in the North Cascades National Park Service Complex. This feature, which the NCCC totally opposes, is one that would

allow the use of Personal Watercraft (ie PWC, Jet- Skis, Water- Bikes) in zoned areas of Lake Crescent. It would be disastrous if the PWC proponents, both private and commercial, were to successfully argue that since Olympic National Park allows PWC use on the NPS- managed waters of Lake Crescent, then the National Park Service should, similarly, allow PWC use on the NPS- managed waters in the North Cascades National Park Service Complex, which consists of Ross and Diablo Lakes and the Skagit River in the Ross Lake National Recreation Area and Lake Chelan and the Stehekin River in the Lake Chelan National Recreation Area.

The North Cascades Conservation Council supports the recommendations of the National Parks and Conservation Association and the Olympic Park Associates with the NCCC's specific emphasis on:

Support of the Olympic National Park Service's Preferred Alternative "A", provided that this Alternative is changed to "Ban Personal Watercraft from Lake Crescent and all other waterways (ie Lake Ozette, Hoh River etc.) of Olympic National Park.

Congress designated the National Parks as uniquely valuable areas, primarily to protect and preserve natural, wildlife, water quality, and wilderness resource values. PWC would have an environmentally degrading impact upon these values as well as an excessively disrupting impact on the peace and quiet, fundamental features of the National Park System. Olympic and North Cascades National

... To protect and preserve the North Cascades' scenic, scientific, recreational, educational, wildlife, and wilderness values

For Wildness and Diversity

Dave Morris, Superintendent
Olympic National Park
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Port Angeles, WA 98362


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3 January 1997

Dear Sup. Morris:

I appreciate the opportunity to comment on the recently released draft management plan for Lake Crescent. While Alternative A does a good job of protecting park resources, I do believe there are a few problems.

The biggest problem with Alternative A is that it permits personal water craft to operate in specific "zoned" areas of the lake. Another problem is that it makes no effort to limit the speeds or noise of conventional boats operating on the lake. A third problem relates to the expansion of the Lake Crescent Lodge. The increase in the number of guest rooms may not be objectionable, but the addition of conference center facilities is. There are plenty of conference facilities outside of the park.

The design of personal water craft is inherently disruptive, and I do not feel there is a place for them in a national park setting. Personal water craft produce an excessive amount of noise for their size. The operating style is also much more erratic, and unpredictable than conventional boats. By the personal water craft industries own admission personal water craft are too dangerous to operate at night, and are therefore not equipped with running or navigation lights. They also lack safety features found in conventional boats such as fire extinguishers, flares, horns, or radios. Personal water craft also have a disproportional accident rate.

Personal water craft are not an appropriate form of recreation in a national park setting. Personal water craft use is in conflict with the National Park Service's obligation to protect natural and cultural resources. Certainly noise and speed limits are reasonable within a national park.

Once again I thank you for the opportunity to provide input, and I look forward to your response.

Respectfully,



Mitch Friedman
Executive Director

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November 15, 1996

David Morris, Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

RE: Draft Lake Crescent Management Plan and EIS

Thank you for the opportunity to comment on your Draft Lake Crescent Management Plan/EIS. Olympic Park Associates supports your effort to envision a long-range management strategy for the Lake Crescent area. As one of the most beautiful, as well as heavily visited areas of the park, Lake Crescent is due for an integrated management plan--one which protects both the natural character of the area as well as the quality of visitors' experience. We feel the draft plan does an excellent job of protecting the former but falls disappointingly short of protecting the latter.

In general, OPA supports your preferred alternative (Alternative A). It goes a long way toward protecting the lake and its shoreline and watershed, improving visitor services, and interpreting the natural and cultural resources of the area. We applaud the park's effort to remove campsites and developments from the lakeshore, return La Poel to a day use site, and upgrade the Spruce Railroad trail to accommodate bicyclists, thus easing traffic hazards on Highway 101. But we take issue with the plan's failure to protect the natural integrity of the lake as well as the quality of visitors' experience by failing to prohibit the use of jet skis. We will discuss this issue first, then go on to comment on other aspects of the the plan point by point.

Jet Ski Use

As you know, the use of jet skis or personal watercraft (PWC) on Lake Crescent has been the source of an increasing number of conflicts and complaints in recent years. The excessive revving and high-pitched, two-cycle whine (up to 100 decibels) produced by these machines is offensive to nearly all visitors to the lake--with the noted exception of jet ski operators. Their noise, which can be heard well up the Marymere Falls trail, destroys the peaceful, contemplative

mood most visitors seek--and expect--in a national park, substituting instead the background noise of a race track. The performance spectacle encouraged by the design and use of jet skis presents a further visual distraction to visitors. one that seriously detracts from the natural ambience of the lake and its setting. Jet skis are inherently different than other motorized craft using the lake; they are extremely fast, dangerous (more than 3,000 accidents, 56 deaths nationwide in 1994 alone), require no training or licensing to operate, and they are able to access shallow water areas and coves inaccessible to other motorized craft. The Washington Department of Fish and Wildlife has expressed concern over jet skis' impacts on fish and wildlife. Like dirt bikes, all terrain vehicles, and other thrill-oriented sport vehicles, jet skis are by their nature incompatible with the purpose for which our national parks were established and entirely inappropriate to a world-class national park such as Olympic.

The preferred alternative's intent to zone the use of jet skis on the lake is ineffective, unenforceable, and addresses none of the above concerns. We urge you to take the necessary step to prohibit these vehicles now, while their numbers are still relatively small. Winter snowmobile use in Yellowstone National Park--which currently exceeds 150,000 per year and presents considerable noise, smog, and wildlife impacts--stands as a painful example of the failure of a national park to take necessary management action when needed. We hope Olympic will not repeat the same mistake.

The following topics in the Draft Lake Crescent management Plan and EIS will be discussed in the order they appear in the plan.

Management Objectives

Although we agree with the stated management objectives, we note that in general they represent a strong management bias toward recreation rather than preservation--a perspective more appropriate to a national recreation area than a national park.

In particular, we note that none of the 13 objectives address the goal of preserving or enhancing the quality of the visitor experience on Lake Crescent in Olympic National Park. This is a major shortcoming that leads directly to some serious flaws in the plan such as the failure to prohibit jet skis, as well as the failure to set a reasonable speed limit and address noise levels for other motorized craft.

Objective 10, "Continue to purchase private property..." is an excellent objective and one we fully support. However it is not addressed in the plan. The topic deserves a full discussion, including the proposed management of

properties acquired by the National Park Service.

Alternative A--Preferred Alternative

The preferred alternative presents a sound management program for Lake Crescent and its surrounding watershed, but one with a few outstanding flaws:

1. It fails to prohibit jet ski use on Lake Crescent.
2. It fails to set a reasonable speed limit or noise limit on other motorized boat use (50 mph is an excessive speed, faster than vehicle traffic on adjacent US Highway 101)
3. Its attempt to zone jet ski use on the lake fails to accomplish a stated management objective: (2) "Provide opportunities for a variety of outdoor experiences...which minimize conflicts between recreational users and are compatible with the protection of park resources and values (emphasis ours).
- 3 4. The plan could be interpreted to allow for incompatible commercial development on lake shore (a new conference center at Lake Crescent Lodge).

Areas Discussed under the Preferred Alternative

Fairholm

OPA supports moving store back from US 101 to be accessed by the N. Shore Road. We recommend using the current store site to develop an interpretive overlook; the site presents one of the best overviews of the lake in the park.

Reconfiguring the Fairholm campground to remove campsites from sensitive riparian areas along the shoreline and separating R.V. sites from tent sites is an excellent recommendation. We advise against adding additional R.V. hook-ups but recommend adding additional walk-in tent sites at Fairholm. They take up less space, encourage low-impact camping, and would alleviate the need for a new bike-in campsite on Spruce Railroad trail.

We recommend non-motorized boat rental at Fairholm (and other concessions) to encourage a quieter appreciation of the lake. We also support bike rental at Fairholm (and other concessions); bicycling is a quiet, non-polluting way to enjoy a national park and one that the park service should encourage.

We support retaining the boat ramp and dock at Fairholm, but we recommend minimal expansion of parking areas to accommodate private boat trailers. Trailer parking is a wasteful use of limited space at Fairholm and elsewhere on Lake Crescent. Attempting to provide for the growing needs of power boaters will inevitably result in blacktopping larger portions of developed areas around the lake. This should be addressed as a major issue in the final EIS rather than dealt with piecemeal in individual site plans. Where possible, the management plan should encourage oar- and paddle-powered boats which have less

environmental and esthetic impacts, do not require boat ramps, and can be carried on the tops of cars.

Barnes Point

OPA does not object to the continued operation of the tour boat, providing its operation continues to comply with the original terms of agreement between the concessioner and the National Park Service. Parking and ticketing should remain off site; a park service interpreter should always be provided for on-board education programs. Additional stops along the lake stops should be allowed only at dock facilities, never along the lakeshore.

At this time, we must object to an expansion of Lake Crescent Lodge by 10% of current capacity. Though a multi-use center at the lodge is not a part of the preferred alternative, it is our understanding that the concessioner plans to replace an existing building with one that will include a scaled-down multi-use center (mention of a multi-use center appears in "Environmental Effects of Preferred Alternative (A)" on p. 58). If this is the case, a "10%" expansion would entail adding on a conference facility, replacing existing units with larger ones, and adding an additional 10% capacity. This strikes us as a considerable expansion of the historic lodge well in excess of 10%. This issue should be presented and fully discussed in the Final EIS.

We are opposed to a new conference facility on Lake Crescent. Educationally-oriented conference groups are best accommodated at the nearby Olympic Park Institute, which is chartered to serve that function. Other private conference groups are more appropriately served in Port Angeles where conference facilities exist.

No new construction should proceed toward Barnes Creek. We recommend that protective structures such as a split-rail fence or other barriers be put in place to protect the riparian zone and sensitive spawning area at the mouth of the creek.

Log Cabin

OPA supports the redesign and reconstruction of resort to conform with historic standards, to eliminate A-frames on the lakeshore, to eliminate RV hookups, and to replace them with cabins.

La Poel

We commend the park service for your proposal to close La Poel to overflow tent camping and return the area to day use only. This would minimize impacts

to the lake due to the poor septic system, and potential impacts to La Poel's outstanding old-growth Douglas-fir forest from trampling and gathering firewood, and removal of hazard trees.

North Shore

We support the park service's plan to upgrade the Spruce Railroad trail for use as a safe alternative to US Highway 101 for bicycles. We suggest that the trail remain gravel surfaced to be acceptable for hikers as well as bicyclists and we urge you to keep new development to a national park standard. Our concern is that the Washington Department of Transportation, which is also endorsing this proposal, will view the trail more as a secondary road for bikes. Since some of the funding for the upgrade may come from the State and other sources, there is a danger that non-park standards may prevail during engineering and construction. We are also concerned that reopening the historic tunnels would require extensive heavy-equipment access and continued maintenance; upgrading the trail around the tunnels may not.

We support the informational kiosk proposed for users of the Spruce Railroad trail, but we suggest it be located at the east end of trail, which is the more frequently used trail head, rather than located somewhere along the trail itself.

We oppose development of a new bike-in campground on the Spruce Railroad trail. As the only undeveloped (trail-accessed) part of the lakeshore, the natural/historic trail corridor should be maintained and no new campground constructed along this trail. As an alternative, the park could expand the number of walk-in/bike-in tent sites at the Fairholm Campground, which is less than 5 miles by road from the west trail head, an easy bike ride. We also recommend bringing the existing Pyramid Peak trail up to a safe standard.

Visitor Services/Facilities

We endorse the concept of an information/orientation facility on US 101 just outside the park. We urge you to insure that the park service message--mission and management--remains clear. Our concern is that the park's message will become blurred amid information from "other public agencies and private organizations." There is a tendency for Lake Crescent to be perceived (and treated like) a national recreation area--a perception the park service has not gone out of its way to correct. The proposed facility offers a good opportunity to clarify this point.

Transportation

We are concerned that investigating the feasibility of widening the East Beach and Lyre River roads to accommodate 4-foot paved shoulders for bikes may foreclose other options. The additional 8-foot surface may also encourage higher speeds, replicating existing conditions on U.S. 101. We suggest investigating the feasibility of a separate biking/walking path adjacent to or nearby existing road.

The commercial tour boat should be required to land only at docks to preserve natural character and quiet of lakeshore. No landings should be permitted on Spruce Railroad trail, picnic areas, beaches, or other undeveloped areas.

Water Recreation: Motorized boat use

There is no question that motorized boat use should be regulated on the lake. We support the proposal to extend the no wake zone to 100 yards around lake shore and 300 yards around developed areas. We further ask that motorized use be restricted for 300 yards around the north and east sides of Barnes Point, including Bovee's Meadow, Lake Crescent Lodge, Moments in Time trail, and the Olympic Park Institute. This would protect the peace and quiet of this heavily visited area.

OPA does not oppose the use of motorized boats on Lake Crescent, but we urge the park service to reduce the maximum speed limit from the proposed 50 mph (in the preferred alternative) to a more reasonable 35 mph. Such a speed is safer, creates less noise and wake, yet it is adequate for water skiing. A 35 mph speed limit would also be much more in keeping with the natural (as well as historic) character of the lake.

We are strongly opposed to unregulated shoreline access by boats. Boat access to shores should be regulated to protect sensitive, damaged, or recovering areas.

Jet Skis

As stated above, OPA is opposed to all jet ski (PWC) use in the park. Jet skis produce excessive and annoying noise, are an esthetic blight, invite high-speed and reckless use, present safety concerns, impact non-motorized boaters, may impact feeding and resting water birds, and have no place in a national park.

Other Alternatives

Since elements of other alternatives may become part of the preferred alternative in the Final EIS, we would like to express our concerns regarding a

few of the management options contained in these alternatives.

Alternative C

OPA is strongly opposed to a "multi-use facility" (conference center) at Lake Crescent Lodge that provide capacity for up to 100 conferees during shoulder seasons. We feel that these types of commercial ventures are best provided for outside national parks. A proposed conference center of this size would be larger than all but the two largest facilities in Port Angeles.

We oppose construction of a second boat dock for tour boat at Barnes Point.

La Poel is a rare example of a low elevation old-growth Douglas fir forest on the lake. We consider continued tent camping at La Poel ill-advised for reasons mentioned above.

Alternative D

Ordinarily OPA would find more to support in this alternative, but it mainly offers excessive protection for already-impacted areas and does not provide for increasing visitor use. We do, however, endorse its recommendations for a ban on jet ski use and a 35 mph speed limit for reasons mentioned above. But we note that DEIS gives no reasoning or justification for reduced speeds. In fact, it offers no discussion of the issue at all, making this recommendation essentially a throw-away.

We do not feel that establishing 25 horsepower limit on motorized craft is justifiable. Again, no rationale is offered in the DEIS. Horsepower per se is not an issue; noise, speed, safety, and wake size are. We recommend a 35 mph speed limit for motorized craft, and a maximum decibel level for noise. This would go much farther toward protecting the quality of the visitor experience on the lake than a horsepower limit for engines.

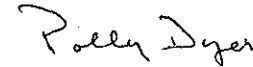
Cultural Landscape Impacts

Page 63, the DEIS states "Closing the tunnels would be a loss and would require mitigation." Actually, the two tunnels along the Spruce Railroad trail are already closed off by natural process (landslide and rockfall) and would require major excavation and reconstruction to reopen. So "closing" the tunnels is a moot point.

Thank you for this opportunity to share our thoughts. The Draft Lake Crescent Management Plan and EIS reflects a great deal of forethought and effort on the part of park staff. The plan provides a positive direction for future

management at Lake Crescent. With the addition of key measures needed to protect the quality of visitors' experience at the lake, it should preserve the natural jewel that is Lake Crescent for countless generations to come.

Sincerely,



Polly Dyer,
President, Olympic Park Associates



Olympic Park Associates

13245 40th N.E.
Seattle, WA 98125-4817

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97 FEB 19 AM 11:18
OLYMPIC PARK ASSOCIATES
PORT ANGELES, WA 98302

[Handwritten mark]

10-Feb-1997

Supt. David Morris
Olympic National Park
600 East Park Ave.
Port Angeles, WA 98362

RE: Draft Lake Crescent Management Plan and EIS

Dear Supt. Morris:

Upon further examination of the Draft Lake Crescent Management Plan/Environmental Impact Statement (MP/EIS), Olympic Park Associates wishes to submit the following comments to supplement those presented in our letter dated 11/15/96.

4 We are concerned about the statement in the MP/EIS stating that proposed developments at Bovee's Meadow "...could put at risk three rare plants occurring there..." (pg. 61) The MP/EIS fails to offer options that would eliminate that risk. It is imperative that the site plan be redesigned to prevent damage to these rare plant species. Additional measures should be implemented to promote the expansion, not restriction, of habitat for those species. This is a significant omission that needs to be corrected in the Final MP/EIS.

Olympic Park Associates wishes to reiterate our strong opposition to allow personal watercraft (PWCs) on Lake Crescent. Lacking in the MP/EIS is any documentation on the effects PWC use will have on the lake (noise, air, and water pollution). Nor is there any analysis on impacts from any of the PWC-zoning options offered. A complete analysis of PWC impacts must be documented in the Final MP/EIS. In the interim, we suggest that a ban be placed on PWC use on Lake Crescent (as was imposed by Supt. Mihalic on the lakes in Glacier National Park), until it can be shown that PWC use is not affecting the environment.

5 In general, we are disappointed by the lack of scientific detail contained in this document. Many of the assumptions about the future condition of the Lake Crescent watershed were not adequately supported by original research. Reliance upon future site-specific EAs or EISs is a recipe for failure to document cumulative impacts to the watershed.

These omissions need to be documented in the Final MP/EIS before an adequate determination can be made regarding impacts from the preferred alternative. Thank you for taking these additional comments into consideration.

Sincerely,

Polly Dyer

Polly Dyer
President, Olympic Park Associates

1574



REC-50
MAIL 1054

March 18, 1997

97 MAR 20 AM 10:29

Dave Morris, Superintendent OLYMPIC NATIONAL PARK
Olympic National Park PORT ANGELES 98362
600 Park Ave
Port Angeles, WA 98362

Dear Dave:

I am writing regarding the Lake Crescent Management Plan and draft EIS.

As you know, Olympic Park Institute is a non-profit environmental education institute located on the south shore of Lake Crescent at Barnes Point. Over the past eight years OPI has grown to become one of the Northwest's premiere environmental education institutes, providing residential educational opportunities to over 4,500 people each year. The Field Seminar, School and Elderhostel programs that we offer touch all generations, and serve our mission of promoting environmental stewardship through education. At present the Institute provides nearly 25% of Olympic National Park's contact time with visitors in natural and cultural resource education.

We want to express our concern that Lake Crescent be managed in a manner that minimizes activities that interfere with the quality of the learning environment on and around the lake. The quiet tranquility and natural beauty that the location generally offers is extremely important to OPI programs. It is something that is commented on by many of our guests, people who have come to the Institute and to the National Park to experience the pristine beauty and serenity that a National Park offers. Our 25 staff members work hard to foster an environment that provides intimate involvement with the natural world. Recreational activities on the lake become a part of that environment, and those that generate excessive noise pollution have a disruptive effect on programs and generally degrade the quality of the educational and overall experience.

Our Board of Directors and staff hope that the final Lake Crescent Plan effectively minimizes those uses that are incompatible with creating and maintaining the outstanding natural environment and educational experience that so many of our participants value at Lake Crescent.

Sincerely yours,

Maitland Peet
Executive Director





RIVERS COUNCIL
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*Conserving
Northwest Rivers
Since 1984*

Mr. David Morris
Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

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97 MAR 20 AM 10: 28

March 19, 1997

re: Lake Crescent Management Plan DEIS, PWC ban, and Alternative A.

PORT ANGELES, WA 98362

Dear Mr Morris,

Thank you for the opportunity to comment on this very important, perhaps precedent-setting draft environmental impact statement (DEIS) for the Lake Crescent Management Plan.

The specific issue we would like to comment on is the possible National Park Service (NPS) authorization of the use of personal watercraft (PWC) on Lake Crescent. The Rivers Council of Washington strongly feels the use of PWC on NPS waters is inappropriate and should be banned.

Now is a pivotal time for not just for Lake Crescent, but for all bodies of water on federal, state, and private lands. Pivotal because you must now make difficult decisions regarding whether and to what extent these bodies of water will be used and abused by vehicles which have demonstrably detrimental effects upon the natural environment, present a nuisance to other users of the resource and pose a potential danger to human-powered recreationists, as well. For these reasons, the Rivers Council of Washington (RCW) urges you to ban the use of PWC on Lake Crescent and select Alternative A in the Lake Crescent Management Plan.

The Rivers Council of Washington is the Pacific Northwest's oldest non-profit river conservation organization and has represented the interests of Washington State whitewater recreationists since 1984. Part of our mission is to help "preserve, enhance and restore rivers and their watersheds in Washington State for their natural, recreational and cultural values". We try to strike a balance between protecting water recreation while attempting to ensure the ecological health of our watersheds. RCW feels that only Alternative A and a PWC ban meets this balance.

More specifically, Rivers Council of Washington calls for a ban on PWC use on Lake Crescent, for the following reasons:

- 1) PWC use appears to be fundamentally incompatible with NPS policy;
- 2) Authorizing PWC use in a National Park would set a bad precedent for all federally protected waters including Wild & Scenic Rivers, National Wildlife Refuges, National Monuments;
- 3) The DEIS does not account for the future growth of PWC usage on Lake Crescent, which jeopardizes the safety and welfare of the public; and
- 4) PWC use is potentially detrimental to the aquatic environments of both Lake Crescent and the Lyre River.

1) PWC use is fundamentally incompatible with National Park Service policy. Congressional authorization of the National Park Service clearly states the mission of the service. The National Park Service Organic Act states that the National Park Service was established "...to promote and regulate the use of the...national parks...which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations". Any degradation to the flora or fauna of Lake Crescent that is the result of pollution emitted from PWC (described in #4 below) will have an ecological ripple-effect that would detrimentally impact the enjoyment at least the next generation of park users. Clearly any management plan that fails to leave a national park "unimpaired for the enjoyment of future generations" is not in the spirit of the Act.

2) Authorizing PWC use in a National Park would set a bad precedent for all federally protected waters including Wild & Scenic Rivers, National Wildlife refuges, National Monuments.

Regulations restricting the use of PWC have been implemented in several National Wildlife Sanctuaries, most notably Monterey Bay in California. An attempt by PWC enthusiasts to overturn the Monterey regulations failed and set an important precedence for National Wildlife Refuges. Allowing any PWC access to Lake Crescent would now crack the door for personal watercraft use in all federally protected waters such as Wild & Scenic Rivers, and National Monuments, and may limit the ability of the general public or the government to mandate any enforceable regulation in the future. A complete ban is therefore the only alternative.

3) The DEIS does not account for the potential growth in PWC popularity and its effects on Lake Crescent and the general public.

Users of PWC and human-powered vessels often clash, sometimes with disastrous consequences. When PWCs account for over a third of boating accidents and 19 percent of watercraft deaths, serious considerations need to be made regarding safety, regulation and the growth of the "sport." The plan to regulate PWC use on the Lake Crescent may grossly underestimate the popularity of the "sport" in much the same way the use of snowmobiles was underestimated at Yellowstone. The NPS cannot predict the number of potential PWC users on Lake Crescent in the near or distant future, and therefore cannot predict whether the NPS is equipped to manage the public dangers associated with PWC. Also, since park law enforcement resources are already stressed to their limits, it may not be responsible for the NPS to permit use of an expanding form of recreation with such a poor safety record. Due to the unpredictable expansion in PWC popularity and the inherent dangers associated with PWC, authorization of the use of personal watercraft on Lake Crescent would present a significant incalculable risk to the general public. The only way to eliminate this needless risk is through a complete PCW ban.

4) PWC use is potentially detrimental to the aquatic environments of both Lake Crescent and the Lyre River.

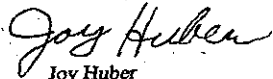
The DEIS provides no evidence or study addressing the potential effects of non-fuel injected two-stroke engines upon the flora and fauna of Lake Crescent. At this time,

nearly all commercial PWC use non-fuel injected two-stroke marine engines. Therefore PWC engines and non-fuel injected two stroke engines are effectively synonymous. The EPA estimates that non-fuel-injected two-stroke marine engines generate more unburned hydrocarbons (HC) than all the cars, trucks and buses in the U.S. combined. A recent study performed at Lake Tahoe suggests that non-fuel injected two-stroke engines can have significant ecological consequences to zooplankton populations, and therefore the entire food chain. When subjected to ultraviolet light, as was discovered in the study, some of the non-evaporated unburned HC were converted into carcinogenic polycyclic aromatic hydrocarbons (PAH). Minute concentrations of PAH in the parts per billion (ppb) and even parts per trillion (ppt) can result in significant zooplankton mortality that could ultimately lead to reduced fish populations, an increase in phytoplankton and eutrophication of the lake. Therefore, in the case of Lake Crescent, PWC usage would inevitably cause some PAH pollution that could threaten or endanger the world's only Beardslee trout population. Pollutants would probably also drain from the lake via the Lyre River and effect anadromous fish populations downstream. Based upon this evidence, Rivers Council of Washington supports a ban on PWC usage on Lake Crescent.

2 The Lake Crescent Management Plan DEIS as a whole does not address the potential effects of any of the concerns listed above and poorly describes the environmental effects of the plan in general. Other environmental parameters that may be effected but were poorly addressed were: air quality, noise pollution, and wildlife. Ironically, there is no mention of the potential effects of non-fuel injected two-stroke engines, which would likely have the greatest negative impact of any element within the plan. [As to the remainder of the recommendations made by the NPS in the DEIS, the Rivers Council of Washington supports Alternative A, conditional to a complete ban on personal watercraft on Lake Crescent.

Again, the Rivers Council is very thankful to have the opportunity to comment on this very important project. We urge you to make the difficult decision that is for the greater welfare of the public, the park and its wildlife. We urge you to make a definitive statement regarding PWC by supporting Alternative A along with a complete ban of personal watercraft on Lake Crescent.

Sincerely,



Joy Huber
Executive Director, Rivers Council of Washington



Dan Clarkson
President, Rivers Council of Washington



SIERRA CLUB

Cascade Chapter

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OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

1316

10-Feb-1997

Supt. David Morris
Olympic National Park
600 East Park Ave.
Port Angeles, WA 98362

RE: Draft Lake Crescent Management Plan and EIS

Dear Supt. Morris:

The Cascade Chapter of the Sierra Club offers the following comments regarding the Draft Lake Crescent Management Plan/Environmental Impact Statement (MP/EIS). Due to the profound lack of scientific analysis absent in this Environmental Impact Statement, we feel these omissions warrant extensive modifications of this document, necessitating the development of a Revised Draft EIS, before adequate determination can be made regarding impacts and long-term environmental consequences resulting from implementation of the preferred alternative.

We will identify the omissions, and discuss our position, on each affected resource in turn.

Air Quality

Due to the absence of monitoring equipment in the Lake Crescent watershed, there is insufficient data to adequately assess the effects of implementing the preferred alternative. The mere assessment that "minor, short-term decreases in air quality during construction" (pg. 58) says nothing about the long-term affects on air quality following completion of said project.

The MP/EIS does recognize that "pollutants are appearing in plant tissue of higher elevations in the park." (pg. 39) A Revised Draft EIS must address what actions the Park Service will take to 1) determine the extent of this condition and which plant species are affected in the Lake Crescent watershed, 2) ascertain the source of these pollutants, 3) document that the proposed actions would not further degrade this condition, 4) develop an action plan to reverse this condition, and 5) develop a monitoring program for this condition.

In addition, a Revised Draft EIS must include an analysis of air pollution impacts from:

- 1) vehicular use of U.S. Hwy 101 (incl. projected increases), consideration should also be given on what affect the re-routing of U.S. Hwy 101 would have on reducing air pollutants along the Lake if the current highway was converted to a Lake Crescent Scenic Drive and restricted to non-commercial use
- 2) increased utilization of developed areas (Fairholm, Barnes Point, East Beach, and Log Cabin)
- 3) wood smoke
- 4) allowance of parking for tour boat at Barnes Point as compared to utilization of a shuttle service from Shadow Mountain

... to explore, enjoy and preserve the nation's forests, waters, wildlife and wilderness.

A significant omission in the draft MP/EIS was the complete lack of analysis as to the contribution motor boat use, especially personal watercraft (PWC), have in reducing air quality in the watershed. This must be documented.

Water Resources

The MP/EIS mentions water quality studies back in the 1980's, along with 1991 septic data. There is no mention of a current monitoring program (especially checking for failing septic tanks), nor are any monitoring programs proposed in the MP/EIS. In addition, there were no estimates on water quality loss resultant from: 1) expansion of Lake Crescent Lodge (affects from the reduction in natural cover, larger surface area from buildings and parking lots which would increase runoff, etc), 2) motor boat use, 3) PWC use, 4) oil/gas runoff on U.S. Hwy 101, and 5) parking expansion impacts at East Beach and Log Cabin Resort. Once again, no program to carefully monitor for failing septic systems (probably in conjunction with Clallam County) was proposed.

Vegetation

We are concerned about the overall impacts to lakeside vegetation as stated in the EIS:

"This alternative would have substantial effects on the vegetation at Lake Crescent. More acreage of undisturbed and formerly disturbed vegetation would be permanently converted and committed to recreational development. Some landscapes would cease to be the product of natural processes and would be maintained as manipulated sites. Rare aquatic plant species would be put at added risk from recreational use."

"These effects on vegetation are cumulative in that there is already substantial recreational, transportation and residential development at Lake Crescent. This alternative would continue and expand the trend away from natural vegetation processes." (underlines ours) (pg. 61)

The MP/EIS clearly states that implementation of the preferred alternative will result in long-term degradation of the environment, yet offers no alternatives to mitigate that degradation. For example, proposed developments at Bovee's Meadow (restroom, buoyed swimming area) "...could put at risk three rare plants occurring there..." (pg. 61) yet the MP/EIS fails to offer options that would eliminate that risk. A second example, the development of backcountry walk-in/bike-in campsites on the North Shore. The MP/EIS documents extensive impacts to "undisturbed, pristine sites" (pg. 60) resulting in 1) "remov(al) of vegetation", 2) creation of "informal social trails", 3) "scour(ing) of the area (for) dead and down woody materials but also of live and dead limbs from nearby trees", and 4) "(a)ll vegetation would likely be trampled at the sites, leaving bare ground" (pg. 60) yet supports this action as part of the preferred alternative. Thirdly, the park is well aware of ongoing problems with informal social trails and associated impacts to shoreline vegetation at selected locations around the lake, yet the only management action proposed to mitigate those damages is at Lake Crescent Lodge.

The Cascade Chapter of the Sierra Club feels the cumulative effects to shoreline vegetation warrants a reconsideration of the level and extent of developments proposed around Lake Crescent. The Park Service should seek to reduce the number of disturbed sites, not promote further disturbance, in the Lake Crescent watershed.

To achieve that goal, we oppose the development of backcountry campsites on the North Shore. The proximity of the Fairholm Campground to the proposed construction of a non-motorized, multi-purpose Spruce Railroad Trail precludes the requirement to provide additional

overnight services. This position would prevent resource degradation caused by the development of these campsites. While we support efforts to develop the Spruce Railroad Trail for non-motorized use, and applaud your proposal to gate the North Shore Road at the North Shore Picnic Area, the evidence cited above clearly documents unacceptable environmental impacts to native vegetation and natural processes to warrant elimination of this proposal from the preferred alternative.

The Vail Agenda clearly states that:

"The National Park Service should minimize the development of facilities within park boundaries to the extent consistent with the mission of conveying each individual park unit's significance to the public. Facilities that are purely for the convenience of visitors should be provided by the private sector in gateway communities."

The MP/EIS fails to meet Park Service guidelines, as outlined in The Vail Agenda, on two counts: 1) expansion of units at Lake Crescent Lodge (as well as future assessment of construction of a multi-use facility), and 2) proposed action to reconstruct a new, expanded Fairholm General Store at a new location.

Expansion of the Lake Crescent Lodge, with the potential for year-round services, would add a considerable burden on park resources, with increased visitation (from expansion of units and year-round visitors), less natural surface area (taken up by lodging units, plus additional parking), and a reduction in the number of clients that would use hotels/motels in gateway communities.

As for the Fairholm General Store, there are a number of convenience stores/gas stations on Hwy. 101 approaching Lake Crescent from both the east and west, as well as in the town of Joyce. Visitors and home owners have ample opportunity to obtain needed supplies before they reach the lake, thus eliminating the need to maintain this facility in the park. Since it is proposed to destroy native vegetation to relocate and expand the store away from the highway, the resulting impacts to natural, undisturbed vegetation warrants a proposal to remove, not move, the Fairholm General Store altogether, especially when coupled with guidelines outlined above from The Vail Agenda.

In both case, the MP/EIS fails to document why Vail Agenda objectives should be ignored in promoting these services, as well as fails to present any substantive documentation to projected impacts from the construction of these facilities.

One final item of concern, the Final MP/EIS should articulate the prescribed/natural fire program for the Lake Crescent watershed and the role fire plays in maintaining vegetation.

Wildlife

The MP/EIS documents the existence of threatened and endangered (T & E) species, but fails to propose actions that will promote threatened and endangered species recovery. This Management Plan should outline measures that will promote an *increase* of these species in the Lake Crescent watershed. But even for non-T & E species, the EIS fails to adequately determine the impact to wildlife from the preferred alternative because *"information regarding the multitude of animal species within the Park is incomplete."* (pg. 44) It is very difficult to conclude that one's actions will have no impact without the data to back the claim.

Cultural Resources

The Cascade Chapter of the Sierra Club wishes to state our strong opposition to allowing personal watercraft (PWCs) on Lake Crescent. The MP/EIS fails to make the case that PWC usage is compatible with the appreciation of natural, historical, or cultural values of the park. In fact, the MP/EIS has NO documentation discussing the effects what effects PWC use will have on the environment. The MP/EIS has NO documentation discussing impacts from any of the four PWC zoning options presented. The only discussions of PWC effects identified was for Alt. B, and it clearly stated: *"Continued use of PWCs ... may result in increased noise as well as disrupting the scenic resources of the area, detracting from the quality of the visitor experience. PWCs in particular can be dangerous and may impact the safety for PWC operators and other lake users alike."* (pg. 67) The Revised Draft EIS must include a complete analysis of impacts for each of the four zoning options outlined, as well as a complete assessment of impacts resulting from PWC use in general.

2 In general, we feel PWCs are clearly an example of an inappropriate recreational use in a National Park. Due to the noise levels and patterns of usage by many PWC-operators, PWC usage negatively affects other park users. We feel it is important that you support your colleagues in other National Park units that have already chosen to ban PWCs from park waterways and urge you to follow their lead by banning PWCs from all park waters. Furthermore, we feel that additional restriction should be imposed on other watercraft using the lake, with a 35mph maximum speed limit.

Administration, Visitor Use/Experience

Given the limited fiscal realities that the park must contend with, as well as meet stated NPS objectives outlined in The Vail Agenda, it is only prudent for the park to minimize services and facilities which are geared solely for the convenience of park visitors which in turn adds an undue burden on park management. This MP/EIS fails to meet those objectives and states:

"The additional services and facilities being offered in this alternative would impose added demands on the National Park Service... Increased ranger services for law enforcement, patrol, first aid, fire protection would be required... With increased usage and overnight visitor capacities, increased demands for interpretive facilities and services could also be expected." (pgs. 63-64)

"Recreational enhancement would be achieved by several ways. Providing for specific recreational opportunities where they have not existed before... Other projects would provide added convenience or opportunity for a higher volume of visitation..." (pg. 64)

"In the long-term there would be more recreational opportunities available at more sites at Lake Crescent." [underline ours] (pg. 65)

Finally, the a Revised Draft MP/EIS must include an assessment of the Lake Crescent viewshed. Several of the peaks and ridges that form the scenic backdrop on the east and west ends of the lake are not in NPS-ownership. The MP/EIS should conduct a boundary review to determine the practicality of expanding the park boundaries to include adjacent lands to protect these views from the lake and/or commit to developing agreements with affected property owners to ensure timber-harvesting prescriptions are compatible with maintaining this viewshed in a 'natural' condition.

Thank you for taking these additional comments into consideration.

Sincerely,

A handwritten signature in cursive script, appearing to read "Kurt Lauer".

Kurt Lauer
Chair, National Parks and Wilderness Committee
Cascade Chapter of the Sierra Club
8511 15th Ave NE
Seattle, WA 98115

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Southern Willamette Earth First!
POB 10384
97 JAN 28 AM 10:56 Eugene, OR 97440

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To: OLYMPIC NATIONAL PARK
Dave Morris
Superintendent
Olympic National Park
600 East Park Ave.
Port Angeles, WA 98362

Mr. Morris:

January 24, 1997

1 Re: the Lake Crescent Management Plan/DEIS: We oppose the use of recreational motor vehicles and watercraft anywhere in Olympic National Park. One only has to look at the sad example of Yellowstone to see why. If there be any space allocated in the US for citizens to be free of pollution, noise and the mindless arrogance of motorized travel and recreation, the national parks should be it. Let 'em ride the damned things on tailings piles, settling ponds, logging roads, strip mines, drained reservoirs, abandoned highways, fouled rivers, construction sites, parking lots, dumps, dammed creeks, putrid canals, clearcuts, ore heaps, polluted harbors, overgrazed allotments and the little lakes and manicured lawns of suburbia, where the machines will feel at home.

2 In addition, if people want to have conferences, let them do so in the endless supply of pastel hotel facilities that host, in their dim fluorescent-lit confines, gatherings of oily-faced businessmen in cheap suits with nametags. Keep the development crap out of this, and every park, and kindly quit sucking-up to the hucksters who, whispering into the ears of certain dim-witted congresspeople whose greed outweighs any moral or aesthetic sensibilities by several orders of magnitude, have engendered the odious proposition that our *national* parks should become *theme* parks for the bored, lazy and cash-laden. They may dangle before you a fattened budget with promises of shiny new trucks and neat whiz-bang GPS collars to track the beleaguered animals with, but you must be strong. You've been given a mission to protect this place, Olympic National Park—for folks to enjoy, yes—but on the landscape's own terms. Don't screw the pooch.

Sincerely,



James A. Barnes

1572



TAHOMA AUDUBON SOCIETY

TAHOMA AUDUBON SOCIETY
2601 70th Ave W. Suite E
Tacoma, WA 98466-5430
(206) 565-9278

March 19, 1997

Superintendent David Morris
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

RE: Personal Watercraft

Dear Mr. Morris

Thank you for the opportunity to comment on the *Draft Lake Crescent Management Plan and Environmental Impact Statement*. We place a very high value on the chance to participate in the decision making process.

We are strongly in support of the Park Service's preferred alternative (Alternative A). We think it is

an outstanding plan that will ensure good management of the area for the next 15 to 20 years. As great as the plan is, however, we would like to see some changes. Jet skis and other kinds of personal watercraft that may not have even been thought of yet should be prohibited from all parts of Lake Crescent. We consider the extreme speed and noise of these watercraft to be totally out of keeping with the natural beauty of the park and specifically of Crescent Lake. The noise the jet skis make is loud and extremely irritating to anyone who hasn't lost their hearing. Many people visit the national parks and a lake like Crescent just so they can escape noise. Peace, quiet, and tranquility are all part of the tradition of a national park. They are some of the most important reasons for creating the parks and preserving such large tracts of land in their nearly natural state. Preserving quiet places may be just as important, especially in the long view, as preserving natural habitat, critical areas, or endangered species, because it may become next to impossible to for people to escape the constant noise of civilization in the generations that follow. Quiet places are part of the natural environment and people have a need for quiet places. It is a lot easier to protect the quiet of Crescent Lake by not allowing jet skis and other forms of personal watercraft than it would be to allow them and then try to change the policy later when it becomes obvious that the noise is intolerable.

1

The noise the jet skis make is loud and extremely irritating to anyone who hasn't lost their hearing. Many people visit the national parks and a lake like Crescent just so they can escape noise. Peace, quiet, and tranquility are all part of the tradition of a national park. They are some of the most important reasons for creating the parks and preserving such large tracts of land in their nearly natural state. Preserving quiet places may be just as important, especially in the long view, as preserving natural habitat, critical areas, or endangered species, because it may become next to impossible to for people to escape the constant noise of civilization in the generations that follow. Quiet places are part of the natural environment and people have a need for quiet places. It is a lot easier to protect the quiet of Crescent Lake by not allowing jet skis and other forms of personal watercraft than it would be to allow them and then try to change the policy later when it becomes obvious that the noise is intolerable.

2

Additionally, we believe that the quiet, natural state of Crescent Lake would be protected and enhanced by limiting the maximum speed of motor boats to 35 mph and by setting a maximum decibel level for engine noise. Motor boats make a noise, but at a slower speed the noise of a well muffled engine does not carry terribly far and is not terribly irritating.

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OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

We believe that permitting only motor boats and only at slower speeds, and only with quiet engines is enough compromise to allow for fishing and for people to appreciate the scenic beauty of the lake from the water.

3

Also we would like to see limited expansion of use of the shorelines of the lake for boat access or for camping. Shorelines provide invaluable habitat for plants, animals, and birds. These shorelines are sensitive and critical. Human foot traffic can only be detrimental to them and should be limited and regulated carefully. We would like to see Alternative A changed to limit the proposed increases in camping and boat access along the shores of Lake Crescent.

4

Last of all, we are opposed to a ten percent expansion of Lake Crescent Lodge. National Parks were not created to be convention centers. It is important to preserve the historic resort at Lake Crescent, but not to alter greatly. People can go to other places for conferences and conventions. Let's keep the Olympic National Park and Lake Crescent as natural as we can for as long as we can.

Respectfully submitted,

Judy Austin
Liz Lathrop

Judy Austin
Liz Lathrop
Tahoma Audubon Conservation
Committee Co-chair



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PORT ANGELES, WA 98362

630
**The Izaak Walton
League of America**

FLORIDA KEYS CHAPTER

P.O. Box 1485 • Tavernier, FL 33070
305-852-2187 • Fax 305-852-0871

Jan. 16, 1997

Dave Morris, Superintendent
Olympic National Park
600 E. Park Ave.
Port Angeles, WA. 98362

Dear Mr. Morris:

I am enclosing information on the problems of Jet Skis in the Florida Keys. We certainly hope they can be kept out of Olympic National Park and, eventually, all National Parks.

Sincerely,

Joanna Moore, President



**The Izaak Walton
League of America**

FLORIDA KEYS CHAPTER

P.O. Box 1485 • Tavernier, FL 33070
305-852-2187 • Fax 305-852-0871

12-9-96

FACTS ON JET SKIS AND OTHER PERSONAL WATERCRAFT

There is an urgent need to bring Jet Skis and other personal watercraft (PWCs) under control on the Florida waterways. The speedy water bikes are the fastest growing segment of the nation's boating industry. In just the past year, 1995, the number of PWCs in Florida increased by 18 percent, to 58,601.

In 1995 PWCs made up only 8 percent of all watercraft in the state, but they accounted for 38 percent of all boating accidents, reports the Florida Marine Patrol. Most of these accidents involved injuries. Rented PWCs accounted for 46 percent. Monroe County led the state last year in PWC accidents, with 66. Next was Dade County, with 48. As recently as 1991, only two of all boating deaths in Florida involved PWCs. By 1995 this number was up to 12.

The PWC industry acknowledges that many people who buy or rent PWCs are thrill seekers who are not committed to boating lifestyles. One industry spokesman says the craft appeals to a "risk oriented population" that also is attracted to drag racing, sky diving, bungee jumping and motorcycle racing.

But safety is not the only consideration. PWCs degrade the quality of life and endanger swimmers and boaters. PWCs are excruciatingly noisy. One machine zipping back and forth can ruin a quiet afternoon for hundreds of people on shore. Wildlife, too, suffer. Many wading and nesting birds must abandon their territory when the bikes roar by. A PWC can go where none has gone before, and at great speed, into the deepest wilderness, over shallow flats, menacing seagrass beds. The machines are outlawed in the federal wildlife refuges of the lower Florida Keys and in Everglades National Park. In an increasing number of other places, they also are banned or closely regulated.

The Monroe County Grand Jury singled out PWCs in some of its recommendations in a November, 1996 report on water safety problems. The jury suggested that PWCs be required to stay at least 100 yards from public and private beaches, private property and anchored vessels. "We heard testimony that personal watercraft are a serious problem to waterfront property owners. They are dangerous to swimmers and divers. The noise they cause disturbs property owners" and live-aboard vessel owners, said the report. Rented PWCs should stay within sight of the rental agency, and should be limited to a speed of 35 miles an hour, the report said. "Personal

watercraft that can now exceed 60 mph are too dangerous to be under the control of novices on water," it said. The jury urged that the State license all operators of motor vessels, including PWCs.

As a result of public complaints about PWCs, the Monroe Board of County Commissioners plans to appoint a Jet Ski Advisory Committee as soon as staff is available to work with the committee.

Some areas have made significant progress in Jet Ski regulation. Restrictions on PWCs were upheld by a federal appellate court after manufacturers and others sued to overturn them in the Monterey Bay National Marine Sanctuary in California. (Personal Watercraft Industry Assn. et al vs Department of Commerce, et al. Nos. 93-5336 & 93-5348 US Court of Appeals for the District of Columbia Circuit, decided March 3, 1995). There PWCs are restricted to four areas and access routes. In Florida, the state's Second District Court of Appeal on October 25, 1995, upheld a Lee County ordinance that bans PWCs from a specified area, offshore from Sanibel Island. (No. 94-01575) The court found that the ordinance was not in conflict with any state statute. In Washington state, San Juan county this year passed legislation completely banning PWCs from its waters. The industry is suing. Hawaii's Supreme Court has upheld a state law banning commercial operation of thrill craft on certain bays during weekends and holidays. Congress strengthened the states' ability to regulate PWCs when it passed the Coastal Zone Management Act. Massachusetts bans the craft from all but the state's largest lakes, requires slow speed along shorelines, and has a 16 year age requirement. New Hampshire bans PWCs from small lakes. New York, New Jersey and Wisconsin are considering legislation to give local governments authority over PWCs. Key Colony Beach has passed PWC regulations and Orlando and other Florida cities are considering them.

The Florida Keys Chapter of the Izaak Walton League, a national conservation organization, is working for better regulation of PWCs, in response to complaints from fishermen, boaters, swimmers, and those who live on or near the water. The IKE chapter charges that the watercraft industry is working to turn Keys waters into an unrestricted runway for the dangerous and noisy thrill craft. PWCs are taking the magic out of the Keys.

Last December the League ran advertisements in a local newspaper urging residents to write the Florida Keys National Marine Sanctuary in support of PWC controls. The industry reaction was to swamp the Sanctuary mail with about 3,000 letters from around the nation, sent by PWC dealers and their customers, employees in PWC manufacturing plants, and members of PWC clubs. Some of the form letters bore the instructions from Kawasaki Motors Corp., USA, of Irvine, CA., which read: "Simply sign this letter and your dealer will mail it to NOAA for you."

When the first public hearings on the Keys Sanctuary were held in 1991, PWCs were a major issue, with many speakers asking for

regulations. Later, the Nature Conservancy commissioned a poll of 400 registered Monroe County voters, which found that 58 percent "strongly favored" and 17 percent "somewhat favored" restrictions on PWC rental operators and their customers. Only 15 percent "strongly opposed" and 8 percent "somewhat opposed" such restrictions.

The need for PWC regulation became a major concern of the Sanctuary Advisory Council, composed of Keys citizens. A special sub-committee of the Council met with manufacturers and other pro-PWC interests and agreed to major concessions. The compromise, among other things, called for closely regulating PWCs operating within 200 yards of the shoreline and other sensitive or critical areas. But the industry failed to follow up on its commitments, which included a user training program and confinement of rental PWCs to areas that can be monitored from shore. The Advisory Council then recommended that all PWCs be confined to "severely restricted" areas. However, because of pressure from the industry, the final Sanctuary rules failed to single out Jet Skis for any kind of regulation.

Many local jurisdictions around the nation are preparing legislation on Jet Skis, but at every turn they are confronted by the might of the watercraft industry. A recent example is Redding City, California, which banned Jet Skis from a stretch of the Sacramento River. The industry sued and won in circuit court. The city is appealing. Wherever restrictive legislation is proposed, the industry moves in. First it promises to minimize complaints of hazards and noise by better educating the PWC users. It claims education is the only solution. If this argument fails and controls are imposed, the industry sues, and sues and sues. This makes it expensive for hard-pressed cities and counties to defend any controls they may impose. The industry also buddies up to the marine regulatory agencies that advise government on legislation. The Florida Game and Fresh Water Fish Commission has accepted 10 free PWCs for patrol. The Personal Watercraft industry vigilantly protects its interests in Congress.

Citizen groups operating on skimpy budgets find it difficult to compete with this behemoth. But as the nuisance and danger increases, public demand for action grows.



The Izaak Walton League of America

FLORIDA KEYS CHAPTER

P.O. Box 1485 • Tavernier, FL 33070
305-852-2187 • Fax 305-852-0871

Jan. 13, 1997

To: Cabinet Aides

Our Chapter endorses the statements made by Save Our Keys and the Upper Keys Citizens Assn., which have elaborated on the main arguments for approving the Florida Keys National Marine Sanctuary plan as now written.

We would like to offer some additional information that may be helpful.

I worked one of the polls on election day, waving a banner in support of the Sanctuary. Next to me were two members of the Conch Coalition. They would approach the voters and make statements about the Sanctuary that were absolutely false. The two claims repeated most often were these: "If you so much as spill oil on your driveway, they will come and put you in jail." "If your house is more than 50 percent damaged you will not be allowed to rebuild it." I asked them where specifically in the Sanctuary plan were such provisions, but they could not say.

Attached to this statement is some of the literature distributed by the Conch Coalition during the campaign. As you can see, the source of most of the information is not identified. Observe the claims that under the Sanctuary there would be no diving, no boating, no swimming, no fishing, etc., etc. It was a campaign based on ignorance and fear.

The final plan, on which we urge that you recommend Cabinet approval, is weak, but it is better than no plan. It has been compromised exceedingly, in an attempt to calm the opposition. Our hope is that if the Sanctuary survives, its rules can be strengthened over time, to save the precious resource.

I would like to give you one example of over-compromising. It has to do with Personal Watercraft (PWCs), better known as Jet Skis, which are taking the magic out of the Keys. PWCs were one of the first matters of public concern to be raised at the many public Sanctuary hearings. A committee was formed to work out a compromise. The industry made many promises. None of them were carried out. I can give you the details if you would like them. The first Sanctuary plan made some weak provisions about PWC control. The IKE chapter ran an ad in a local paper urging that

people write the Sanctuary urging stiffer PWC rules. About 400 persons did so. In response the Industry sent out a nationwide alert to PWC dealers, manufacturers and clubs. The result was a blizzard of about 3,000 letters from all over the country, protesting PWC regulation. Some of the form letters had the instructions from the dealers still attached to them. Hundreds were from a small town in Georgia that has a PWC manufacturing plant. The final Sanctuary Plan fails to single out PWCs for the needed special regulation.

There is no room for further compromise on the overall plan. Further weakening the plan would result in no plan at all.

To give power to the locals to write their own plan would be the height of folly. In this crowded area of competing uses and threatened resources, we must have some rules, to be enforced by a responsible government agency.

January 17, 1997

David Morris, Superintendent
Olympic National Park
600 E. Park Ave.
Port Angeles, WA 98362

RE: Lake Crescent Management Plan

Dear Mr. Morris:

The Mountaineers has a special connection to the Olympic National Park. Club members fought hard for its creation in 1938, and continually work to protect its natural, cultural, and wilderness resource values for future generations. Many of our 15,000 members also continue to take advantage of the park, including Lake Crescent, to explore and enjoy the outdoors. It is in this context that we wish to offer the following written comments regarding the National Park Service's proposed Management Plan for Lake Crescent.

The Mountaineers generally supports the National Park Service's Preferred Alternative with a few exceptions.

In the first instance, we believe that the Park Service should impose reasonable speed (e.g., 35 mph) limits on motorized craft on Lake Crescent in addition to the recommended 100-foot and 300-foot no-wake rules. Such regulations are well-advised for safety reasons, especially as non-motorized recreational uses on the lake continue to increase. The speed limits will also help to protect the general quality of recreation experience for all visitors in and around the lake as well as lake residents.

The Mountaineers also strongly believes the National Park Service should ban all personal water craft on Lake Crescent. We feel that this particular use of the waterbody conflicts with the National Park Service's mandate to protect natural, cultural, and wilderness resource values within the park.

The Organic Act of 1916 directs the National Park Service to "conserve the scenery and the natural and history objects and the wildlife therein and to provide for the enjoyment of same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations." Such authority includes the ability of the Secretary of the Interior to regulate boating in any manner deemed advisable, including an outright ban. See 16 U.S.C. §1a-2(h) and 36 CFR parts 1.5 and 3.

In an effort to comply with this mandate, the Park Service has already banned personal water craft from the Everglades National Park and Yellowstone National Park. (PWCs have also been banned from Canada's Waterton National Park, which abuts Glacier National Park.) Similar bans are also being considered in Glacier National Park and Big Bend National Park.

The Mountaineers believes that such action is also justified in this case.

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PORT ANGELES, WA 98362



Founded in 1906
to Explore, Study,
Preserve, and Enjoy
the Natural Beauty
of the Outdoors

David Morris
January 17th, 1997
Page 2

Personal water craft disturb the natural quiet on Lake Crescent and thus the recreation experience for many who travel into Olympic National Park for the peace and quiet it provides. Operating between 85 and 105 decibels, PWCs produce noise levels which are exacerbated by the inconsistent and unpredictable acceleration and deceleration that is characteristic of their use.

By design, personal water craft are also capable of reaching many more ecologically sensitive areas than conventional motor boats; and there is mounting evidence that such access contributes to natural resource damage in other areas. For these reasons, the US Fish & Wildlife Service has banned or severely restricted PWC's from Key Deer National Wildlife Refuge, Great White Heron National Wildlife Refuge, Key West National Wildlife Refuge, and Monterey Bay National Marine Sanctuary.

The Park Service's current Preferred Alternative attempts to address these natural resource concerns by imposing a 300-yard no-wake zone adjacent to areas of "sensitive habitat." Such regulations (not to mention the zoned-use rule itself) are impractical and unenforceable without the presence of one or more full-time enforcement officers. The Mountaineers believes that the growing trail maintenance backlog and other more pressing needs warrants against such expenditures, especially since an outright ban will not preclude PWC enthusiasts from using local waters outside the park, including numerous lakes and the waters of Puget Sound.

In light of the above comments, The Mountaineers supports adoption of an amended version of the Park Service's Preferred Alternative, which bans personal water craft use and imposes reasonable speed and noise limitations on all motorized craft on Lake Crescent. Such a decision will help to protect the Olympic National Park as a UN World Heritage Site, a UN Biosphere Reserve, and a treasured link with our natural past for generations to come.

Thank you for the opportunity to comment and please keep us informed as to any future developments concerning this issue.

Sincerely,

THE MOUNTAINEERS

Marcia Hanson

Marcia Hanson, President

(206) 284-6310
300 THIRD AVE. WEST
SEATTLE, WA 98119
FAX (206) 284-4977

(206) 284-6310
300 THIRD AVE. WEST
SEATTLE, WA 98119
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OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362



THE SEATTLE GARDEN CLUB

Member
THE GARDEN CLUB OF AMERICA

1174

February 5, 1997

Mr. Dave Morris, Superintendent
Olympic National Park
600 East Park Ave.
Port Angeles, Was 98362

Dear Mr. Morris,

The Seattle Garden Club strongly supports a ban of PWCs from Lake Crescent in Olympic National Park. We consider Lake Crescent an important national resource within one of our most valuable national parks.

There is no place within any national park that could ever be appropriate for PWCs. Natural quiet is an important resource for people and for animals, and becoming more important with the pace and stress of life today.

As a member of The Garden Club of America we include for you a copy of the GCA's position paper on National Public Lands. We believe the Park Service has every right to decide what uses are appropriate in national parks. Our Board urges you to keep our parks places of natural quiet and wilderness that they are today.

Thank you. Sincerely,

Lyn B. White, President



THE GARDEN CLUB OF AMERICA
598 Madison Avenue, New York, NY 10022

THE GARDEN CLUB OF AMERICA POSITION PAPER — 1995

Position Statement on National Public Lands

Since its founding in 1913, The Garden Club of America has worked to protect plants and to improve the quality of the environment by promoting conservation. Therefore, we strongly believe that our nation's public lands and resources should be managed under a mandate of conservation stewardship for future generations. This will require a national public policy that places priority on conservation and preservation. Such a policy will necessitate the strengthening of legislation and protection of public lands and their resources and the assurance of responsible management for them.

The Garden Club of America, therefore, urges adequate funding for protection, reclamation and management of publicly owned land. We advocate an increase in lands designated as wilderness, expanded protection of the remaining free-flowing stretches of our nation's rivers, and preservation of our wetlands. We encourage a compatible use of land adjacent to public lands, including linking corridors where appropriate.

With regard to management of public lands, The Garden Club of America supports management that is ecologically sensitive and protects the quality of the natural ecosystem. We strongly support efforts to safeguard biodiversity. We recommend better resource management of water, timber, minerals and forage. We urge that these resources on public lands not be sold or leased for less than fair market value. The Garden Club of America consistently favors conservation and preservation of our natural resources.

In support of this statement, The Garden Club of America advocates:

- Fostering biodiversity
- Conservation and preservation of flora and fauna
- Protection of wetlands, forests and rivers
- Designation and increased protection of wilderness areas
- Protection of national parks
- Reclamation of damaged lands

Established in 1913, The Garden Club of America (GCA) is a national organization with member clubs from coast to coast and in Hawaii working to improve and promote the quality of the environment, to educate the public and to promote the knowledge and love of gardening.

Revised December 1994



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OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

THE WILDERNESS SOCIETY
PACIFIC NORTHWEST REGION

March 17, 1997

Mr. David K. Morris, Superintendent
Olympic National Park
National Park Service
600 East Park Avenue
Port Angeles, WA 98362-6798

RE: Draft Lake Crescent Management Plan/EIS

Dear Superintendent Morris:

On behalf of The Wilderness Society's 310,000 members, including nearly 12,000 in Washington State, we are pleased to submit these comments on the Draft Lake Crescent Management Plan/EIS.

We find the document inadequate in scope and detail. Further, we oppose National Park Service recommendations regarding management of personal water craft (PWC) on Lake Crescent. In our view, the use of PWCs should be prohibited, without exception, in all US national parks. Such a national policy is long overdue. That superintendents are individually dealing with this issue park-by-park is a sad commentary on the senior leadership of the National Park Service.

Lake Crescent is a unique natural area within the internationally significant Olympic National Park. It is not merely a recreational area for local landowners and nearby residents. Indeed, as a World Heritage Site, Olympic sits at the pinnacle of protected areas world-wide, and enjoys a constituency of enormous breadth. Visitors to Lake Crescent deserve an opportunity to enjoy an extraordinary national park experience - an experience unavailable elsewhere. Your decision regarding the use of PWCs, and similar issues posed by excessive power boat speeds and horsepower, will determine whether such opportunity remains available. With regard to water-based recreation, we believe the only acceptable alternative is Alternative D.

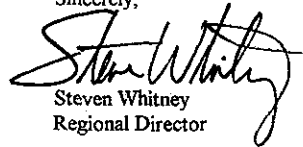
2 In our view, the use of personal watercraft and high speed boats is neither necessary nor appropriate at Lake Crescent. Nor is their enjoyment substantially enhanced by use within a national park. These are merely water-dependent uses - not park dependent - and the State of Washington has abundant alternative water bodies more appropriate for their use. Indeed, if the National Park Service attempts to meet the diverse recreational demands of an ever-growing visitor base, the very values for which the area was established will be compromised. The phrase "...to provide for visitor enjoyment" in the NPS Organic Act does not mean cater to every whim or recreational aspiration. Hopefully the Park Service has learned something from its unfortunate experience with snowmobiles at Yellowstone.

More generally, we found the environmental document to be lacking in detail and intellectual rigor. In the section on Environmental Effects, important potential environmental and social impacts of the various alternatives were ignored outright or addressed only superficially. For example, the analysis of the preferred alternative on Water Resources consists of less than 200 words and is limited to runoff from new parking lots and siltation from construction sites. Yet, the analysis of another alternative includes additional reference (although superficial) to the impact of hydrocarbon pollution from watercraft. Surely, given that Lake Crescent is the primary resource considered in the analysis, effects of the alternatives on water quality deserve more thorough consideration.

3 Similar observations can be made throughout the EIS for each alternative and environmental category. In our view substantial new information and enhanced levels of intellectual rigor will be required for this document to meet any reasonable standard of acceptability.

Thank you.

Sincerely,


Steven Whitney
Regional Director



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OLYMPIC NATIONAL PARK
PORT ANGELES, WA 99362

Washington Kayak Club - P.O. Box 24264 - Seattle, WA 98124
c/o Dara Kessler, WKC Conservation Chair/Board of Directors
14642-203rd Avenue SE, Renton, Washington, 98059-8131
Tel: 206/277-5810, Fax: 277-0551, E-mail: 74151.2407@compuserve.com
March 14, 1997

Mr. Dave Morris, Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362-6757

RE: Lake Crescent Management Plan DEIS

Dear Mr. Morris:

This letter provides additional information on the Lake Crescent DEIS and supplements WKC's preliminary letter on this subject dated December 5, 1996. The WKC endorses the National Parks and Conservation Association's submitted comments, as follows:

We support the National Park Service preferred Alternative A, provided that the following three changes are made:

- 1) **Ban Personal Watercraft from Lake Crescent and All Waterways of Olympic National Park.**
PWCs are noisy, disruptive to fish and wildlife and inappropriate for a national park managed primarily to protect natural, cultural and wilderness resource values. PWCs are used to drive erratically and jump wakes, not to appreciate the grandeur, peace and quiet of a national park. There are plenty of nearby alternative places to drive PWCs. If they're permitted on Lake Crescent, it won't be long before they're in all of our national parks and waterways.
- 2) **Set a Maximum Speed Limit of 35 m.p.h. and Ban All Excessively Noisy Boats.**
Even conventional boats have been getting faster and louder on Lake Crescent. Some people have even suggested running hydrofoil races! The management plan must include reasonable maximum speed limits for all boats and a ban on boats creating excessive noise.
- 3) **Oppose Convention Facility Development at the Lake Crescent Lodge.**
Although it may be acceptable to expand Lake Crescent Lodge's ability to accommodate visitors by up to 10%, park managers should not permit the construction of conference center facilities in the park. There are plenty of existing conference center facilities in nearby Port Angeles.

We know that you are under a lot of pressure from PWC proponents. We urge you however, not to put Olympic National Park up for sale! Thank you for your very careful consideration with this issue.

Sincerely,
Dara Kessler

Dara Kessler, WKC Conservation Chair/Board of Directors

677

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OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

Dave Morris, Superintendent
Olympic National Park
600 East Park Ave.
Port Angeles, Wa. 98362

Dear Mr. Morris,

The Washington Wilderness Coalition (WWC) is submitting the following comments for the draft management plan of Lake Crescent area. The WWC is composed of a group of forty member groups and over 6,000 individual members throughout Washington state. We are concerned with protection of our public lands.

Although we generally agree with the proposed alternative (A), we feel this plan does not go

far enough in protecting our national parks. In regards to the personal water crafts, it is not

1 enough to just zone these Jet-skis into certain portions of the Lake Crescent. We are calling

for a complete ban on all personal water craft carriers (PWC) in National Parks. In addition

to motorized boats these jet-skis will effect the entire lake, not just the zoned area.

It is impractical and unenforceable to zone PWCs to a portion of the lake and doing so would not mitigate all of the impacts created by PWC use. In these fiscally constrained times, it is unrealistic to say that the park will pay a full-time ranger in charge of PWC enforcement, in addition to being an inappropriate use of limited park personnel.

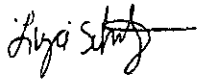
PWCs are designed primarily for speed and maneuverability and have no brakes or conventional safety features. PWCs are fundamentally different than conventional boats in terms of use. They are marketed as "thrill" and "adventure" vehicles and are inherently more dangerous than conventional boats. In addition, PWCs produce a loud, disturbing noise. PWCs produce noise levels in the range on 85-105 decibels (dB) per unit. The American Hospital Association recommends hearing protection for occasional sounds above 85 dB. In addition, PWCs impact fish habitat, wildlife and other natural resources. The USFWS has used existing potential PWC impacts to wildlife as the primary justification for banning and /or severely restricting PWC use at Key Deer National Refuge, Great White Heron National Refuge, Key West National Refuge and Monterey National Marine Sanctuary. For similar reasons, PWCs have also been banned in Everglades National Park, Yellowstone National Park and Canada's Waterton National Park and are currently being considered for Glacier and Big Bend National Parks. All of this information previously mentioned has little to do with appreciating a national park which is managed primarily to protect natural, cultural and wilderness resource values. PWCs should be banned from our national parks. National parks are a place to enjoy the outdoors in a quiet natural setting, while there are plenty of other lakes and water bodies that are appropriate for PWC use. The approval of PWC in our national parks is in conflict with the cultural and wilderness values associated with our National Parks.

2 In addition, the preferred alternative makes no effort to limit the noise and speed of conventional motorized boats and /or PWC.

3 An additional concern we have regarding the Lake Crescent Draft Management plan is the addition of a conference center in conjunction with the expansion of the lodge. Although a ten percent increase in the number of guest rooms may not be objectionable, we do not feel it is appropriate to build a convention facility in our national park.

In conclusion, we do not support the proposal to allow personal water craft into Lake Crescent, it will only set a disruptive, destructive atmosphere in our beautiful and quiet Lake

Crescent. PWC use is in conflict with the National Park Service's obligation to protect cultural, natural and wilderness values. WWC proposes a complete ban on PWCs in all National Parks. Thank you for your time and consideration of these comments.



Liza Schmitz

Roadless Area Monitor



Cathie Currie

Executive Director

LOCAL, STATE, AND FEDERAL AGENCIES

Board of Commissioners, San Juan County, Washington

In response to public comment received on the draft plan, as well as additional issues raised and further impact analysis, the park superintendent has reevaluated the use of PWC on Lake Crescent and has determined it to be an inappropriate use of Olympic National Park. This determination is based on the potential threat posed to park resources and values and the adverse effect on the experience of other park visitors, particularly those seeking a resource-based experience dependent on a national park setting. An administrative record providing the basis for the proposed ban on PWC use is provided in Appendix A.

City of Forks, Washington

1. A description of the services available at the Fairholm store can be found in the "Affected Environment" section of the plan under the heading "Concession Operations/Non-Profit Organizations".

The National Park Service recognizes the importance of a store at Fairholm that serves visitors and provides safe access and parking. Under the NPS proposed action (Alternative A), a new store and parking area would be built at a site to be selected during the site design process. Access would be available from the North Shore Road. The existing store, gas pumps, and parking would be relocated. The concessioner would have the option of providing food service within the new structure as long as adequate parking is provided.

2. Personal watercraft are defined as vessels which use an inboard motor powering a water jet pump as its primary source of power and which are designed to be operated by a person sitting, standing or kneeling on the vessel, rather than the conventional manner of sitting or standing inside the vessel. This definition has been included in the final plan (see Appendix A and glossary).

3. Each of the major known historic structures in the Lake Crescent area (Lake Crescent Lodge, Rosemary Inn, Storm King Ranger Station [Morgenroth Cabin], and the Spruce Railroad) is described in detail in the "Affected Environment" section of the plan under the subheading "Historic Structures and Cultural Landscapes". This information also appears in the table presented in Appendix C (Summary of Cultural Resource Impacts of the Alternatives).

4. As required by the regulations for implementing the procedural provisions of the National Environmental Policy Act (40 CFR 1501.7), the National Park Service has invited the participation of affected federal, state, and local agencies, Native American tribes, and other interested persons as part of the scoping process for this planning effort. The agency has also solicited comments from the public, including those persons or organizations who may be interested or affected. In addition, the Park Service would continue to inform and solicit input from agencies, organizations, and individuals regarding the plan's implementation. A detailed history of public involvement for the *Lake Crescent Management Plan/EIS* appears in the "Consultation and Coordination" section of the final plan.

COMMENTS AND RESPONSES

Indigenous Native American tribes are to be involved with this and future planning efforts based on NPS management policies (NPS 1988: Chapter 2:9, Chapter 5:4, and Chapter 8:8) and on the government-to-government relationships based on treaty law.

5. The National Park Service has exclusive jurisdiction over that portion of U.S. 101 within Olympic National Park. However, through a cooperative agreement between the Park Service and the Washington State Department of Transportation, the state is responsible for road maintenance on the highway including surfacing, striping, drainage, snow removal, signage, guardrails, bridges, retaining walls, storm damage repair, vegetation control along the road shoulders and maintenance of pullouts. The cooperative agreement expires in 1998. Park staff and WSDOT staff have cooperated well in addressing all of the maintenance concerns on U.S. 101 at Lake Crescent, and it is anticipated the cooperative agreement will be renewed with little, if any, revision. Maintenance practices such as those mentioned are beyond the scope of this planning effort.

The National Park Service, Federal Highway Administration, and the Washington State Department of Transportation are currently coordinating efforts to address safety concerns on U.S. 101 at Lake Crescent. Presently, the Washington State Department of Transportation is moving forward with a project that would involve construction of a reinforced concrete half-bridge over the length (approximately seventy feet) of the failing concrete crib wall on Govan Hill. This project is already funded for construction and is anticipated to begin in late 1998 or early 1999. Additionally, the Department of Transportation is developing a project that would involve the scaling of loose rock at two rockfall locations. This project is also planned for late 1998 or early 1999.

6. Parts of the Old Olympic Highway may be eligible for the national register under a thematic nomination for early Washington state highways. Because of the many changes to the route, grade, and roadbed of U.S. 101, little remains of the Old Olympic Highway. This is especially true of the section around Lake Crescent. None of the original engineering features are readily apparent. The fact that President Roosevelt drove around the lake does not make the road eligible for the national register. This management plan would not be the appropriate avenue for pursuing a nomination for the Old Olympic Highway.

7. The National Park Service would be willing to entertain such a proposal. However, the decision to approve these types of concession operations would ultimately rest with the park superintendent.

8. The National Park Service already possesses this type of information.

9. The Lake Crescent area is part of the Lake Crescent/Sol Duc subdistrict (for resource education). Any interpretive planning that occurs at Lake Crescent would be in conjunction with parkwide interpretive planning. As planning on the subdistrict level occurs, an interpretive plan for the Lake Crescent/Sol Duc area would be developed.

Clallam County Parks, Fair and Building Maintenance Department

1. Under the NPS proposed action (Alternative A), a 100-yard no-wake zone would be established from the shoreline, with a 300-yard no-wake zone adjacent to public use areas, the two historic districts, and

habitat-sensitive areas. These distances have been chosen to ensure visitor safety as well as resource protection.

2. See response to comments under "Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington".

3. Under the NPS proposed action (Alternative A), a 40-mile per hour (mph) speed limit would be established lakewide for motorized watercraft (a 35-mph limit would be established under Alternative D). Both speeds are considered a safe and reasonable limit for all types of boating recreation. NPS watercraft would be excluded from this restriction in order to carry out law enforcement and rescue activities.

4. The National Park Service does not plan to eliminate all RV camping from the Log Cabin area, only those sites bordering the creek where resource degradation is a problem (approximately 8-10 sites would be eliminated; the actual number would be determined during the site design process). Despite a reduction in RV sites, RV camping would still be available locally at Log Cabin and the Fairholm campground within the park, and at the Shadow Mountain General Store along U.S. 101.

5. Under the NPS proposed action (Alternative A), existing campsites along the shoreline at the Fairholm campground would be removed and the sites revegetated. This action would be taken to alleviate resource damage (e.g., soil compaction, vegetation trampling, barren ground) that has occurred at these sites due to heavy visitor use.

Spokane City/County Department of Emergency Services

See response to comments under "Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington".

U.S. Environmental Protection Agency

No response required.

Washington State Interagency Committee for Outdoor Recreation

As stated in the draft document on page 56, "in many places, there are no shoulders and most vehicles do not have adequate room to negotiate around cyclists without risking collisions with oncoming vehicles. Additionally, limited sight distance on the more winding sections may cause vehicles to come upon bicycles without warning." Most cyclists would agree that such situations pose hazardous conditions for cyclists, conditions that are prevalent along U.S. 101.

In the interest of safety, the National Park Service would like to see bicycle traffic removed from U.S. 101. As a short-term solution to help make the highway safer for bicycles, the Washington State Department of Transportation is looking at installing a warning light system that could be triggered by cyclists to alert motorists when they are on the road. Over the long term, establishing a multiple use trail along the Spruce

COMMENTS AND RESPONSES

Railroad grade would eliminate the need for cyclists to travel along the narrow, windy portion of U.S. 101 bordering Lake Crescent. However, those cyclists desiring to travel along U.S. 101 would still be permitted to do so.

Washington State Office of Archeology and Historic Preservation

In areas that have not been previously surveyed, cultural resource inventory and evaluation for historic structures, cultural landscapes, archeological sites, and traditional cultural properties would be required, as would appropriate levels of consultation with the State Historic Preservation Office. Survey, evaluation and consultation would be completed prior to taking any action.

The text of the document has been revised to indicate that *The Secretary of the Interior's Standards for Rehabilitation* (NPS 1995b) would guide design work on historic buildings and structures.

ORGANIZATIONS

Cape George Hiking Group

See response to comments under "Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington".

Cascade Conservation League

1. See response to comments under "Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington".
2. Under the NPS proposed action (Alternative A), a 40-mile per hour (mph) speed limit would be established lakewide for motorized watercraft (a 35-mph limit would be established under Alternative D). Both speeds are considered a safe and reasonable limit for all types of boating recreation. NPS watercraft would be excluded from this restriction in order to carry out law enforcement and rescue activities.
3. Construction of a multi-use facility at Lake Crescent Lodge is not included in the NPS proposed action (Alternative A); it is only contained in Alternative C.

Central Sierra Environmental Resource Center

See response to comments under "Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington".

Chequamegon Audubon Society

See response to comments under "Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington".

Friends of Lake Crescent

1. While visitation in 1996 did show a drop from 1995 levels, since 1939, when annual visitation tallies were begun, yearly park visitation has shown an overall increase (see Appendix B). In the past 10 years (1987-1997), annual visitation at Olympic National Park has increased 49 percent, from 3,362,535 in 1987 to 5,023,302 in 1997.

2. Information on use patterns and trends, and user conflicts on Lake Crescent is limited. Statements regarding use of the lake are based primarily on observations by NPS personnel, visitation and occupancy records for concession operations, and occupancy levels at Fairholm campground. The document has been revised to delete the reference to "heavily used"; however, the National Park Service believes that use at Lake Crescent is increasing based on the above information sources. There are no data to indicate that fewer boats use the lake today than did 25 to 35 years ago. The Park Service also anticipates increased use of the lake in the near future. Documentation used to support this statement has been added in the final plan (see Appendix B). Since 1994, occupancy rates at park campgrounds, including Fairholm, have been measured by counting the numbers of campsites occupied each night. All counts are approximate and are based on camper registration forms as well as observations made by park staff. Prior to 1994, campground visitation was estimated by counting the actual number of overnight occupants at the campground.

Occupancy rates at concession-operated lodges are measured by counting "visitation" (the actual number of overnight guests), as well as "percent occupancy" (the number of occupied rooms compared to the number of rooms available for sale).

3. Statements concerning recreational use conflicts are based on observations, as well as NPS incident reports and visitor complaints. The many letters received on the draft document commenting on intrusions on the visitor experience and concerns about visitor safety, particularly with regard to personal watercraft (PWC) use, and the need for regulations or limitations on noise, speed, and location of watercraft operation are also an indication that user conflicts do exist. Although information on use and user conflicts may be limited, it is the intent of the National Park Service to initiate a proactive management strategy to avoid or minimize user conflicts now and in the future. In the absence of any limitations on use of the lake, the potential for user conflicts and decreased safety will likely increase as recreational use of the lake increases.

4. Natural processes are those that lack human intervention. The NPS's *Natural Resources Management Guideline* (NPS 1991c) describes the purpose of natural resources management as follows:

Natural resources are composed of inherently complex organisms, processes, and systems. The natural resource policies of the NPS emphasize the need to manage natural resources and values of the parks in a systematic, consistent, and professional manner. These resources and values include ecosystems and their component plants, animals, water, air, soils, topographic features,

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geologic features, and paleontologic resources, and aesthetic values, such as scenic vistas, natural quiet, and clear night skies. Natural processes and systems are dynamic, are often beyond immediate human control, and are affected by activities both within and outside of NPS units.

Understanding of these processes and systems is far from complete, yet the NPS is charged with management and protection of the natural resources of NPS areas into the future. The fundamental objectives of NPS natural resource management, as prescribed in policy, are to manage the natural resources of the National Park System to maintain, restore, and perpetuate their inherent integrity and, when consistent with the foregoing, to provide opportunities for visitors to benefit from and enjoy natural environments which are evolving through natural processes minimally influenced by human action.

Protection of water quality means that the park is interested in preventing the deterioration of existing high quality water within the Lake Crescent watershed. As a result of editing, the entire paragraph, including the referenced text has been deleted and no longer appears in the plan.

5. At issue is the improvement of interpretive services for park visitors, including the dissemination of information and the interpretation of significant natural and cultural resources in the area. As a result of editing, the entire paragraph, including the referenced text has been deleted and no longer appears in the plan.

6. The original statement should have also mentioned the historic resources noted. However, as a result of editing, the entire paragraph, including the referenced text has been deleted and no longer appears in the plan.

7. Incompatible land uses include those activities that encroach on park values, have impacts on natural resources of the park, or are counter to park management objectives. They might include such activities as logging within the watershed, road construction which causes runoff of silt or pollutants into the park, or destruction of contiguous wildlife habitat. Sometimes these incompatible land uses can be mitigated through agreements with adjoining landowners or agencies; sometimes they cannot. As a result of editing, the entire paragraph, including the referenced text has been deleted and no longer appears in the plan.

8. The original statement should have included reference to landowners as well. Indigenous Native American tribes are to be involved with this and future planning efforts based on NPS management policies (NPS 1988: Chapter 2:9, Chapter 5:4, and Chapter 8:8) and on the government-to-government relationships based on treaty law. As a result of editing, the entire paragraph, including the referenced text has been deleted and no longer appears in the plan.

9. The *Final Lake Crescent Management Plan/EIS* addresses the existing and potential impacts associated with management of the Lake Crescent watershed and guides future decisions regarding resource protection and visitor use of the area for the next 15-20 years. The quality of the park visitors' experience is a subjective issue, and not easy to measure in statistical fashion. Every visitor's perception of the quality of his or her experience will be unique, based on individual tastes, expectations, background and interests. General assessments of the quality of the visitor experience can be drawn from visitor comments at ranger stations and other park facilities, as well as letters written to the park. Other inferences may be made by observing the condition of park resources and facilities. (It can be assumed that adequate parking and

well-maintained trails would be seen as an enhancement to many visitors' experience, while the opposite conditions would not.) No statements in the draft plan were made regarding any compromise to the quality of the visitor experience; no data are available on this issue. As a result of editing, the entire paragraph, including the referenced text has been deleted and no longer appears in the plan.

10. The National Park Service acknowledges that this quotation should have been attributed to committee report 2247 from the House Committee on the Public Lands. This error has been corrected. The quote now appears under the subheading "Park Purpose" in the final plan.

11. As noted in response # 2, statements regarding use of the lake are based primarily on observations by NPS personnel, in addition to visitation and occupancy records for concession operations, and occupancy levels at Fairholm campground. As a result of editing, the referenced text has been deleted and no longer appears in the plan.

12. The 1976 *Master Plan* provides overall guidance and management direction for the park including a framework for future use and development. The *Master Plan* recommends that development be restricted to the periphery of the park in small areas, generally in their existing location and extent. At Lake Crescent, the plan calls for maintaining campgrounds, expanding lodging/cabins, and providing major interpretive services and equipment rental centers.

The basic management philosophy set forth in the *Master Plan* is stated on pages 21 and 22 of that document:

This master plan for Olympic National Park, therefore, relates public use, development, and interpretation to natural resource constraints. Today's society demands a tremendous variety of programs and facilities in our national parks, in both wilderness and non-wilderness areas. These should be planned and implemented with respect to the available natural resources. The goal of the plan is to integrate man's actions harmoniously into the natural environment.

13. The original statement should have included reference to landowners as well. The text of the final plan has been revised to correct this omission. Native American tribes are to be involved with this and future planning efforts based on NPS management policies (NPS 1988: Chapter 2:9, Chapter 5:4, and Chapter 8:8) and on the government-to-government relationships based on treaty law.

14. The sentence has been revised to add water skiing to the list of activities mentioned; PWC use falls under the broad heading of motorboating. The entire sentence has been moved to the section labeled "Brief Description of the Park and Lake Crescent Area" and now appears under the subheading "Lake Crescent Watershed".

15. This spelling error has been corrected throughout the document.

16. The text has been revised to incorporate the suggested change nearly verbatim and appears under the subheading "Lake Crescent Watershed".

17. It is the professional belief of the park's cultural resource management staff that the National Park Service must be prepared to find prehistoric archeological sites around Lake Crescent. This belief is based

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on: the park's archeological overview and research design (Schalk 1988); the fact that historic tribal sites are located on the Lyre River and Indian Creek; numerous prehistoric sites are located in the high country south of Lake Crescent; there are ethnographic references to Mount Storm King; the park has completed only limited amounts of archeological survey work near the lake; and, there are good travel routes to Lake Crescent from several directions. Nearly identical sets of corroborating evidence have been used to successfully predict the location of prehistoric archeological sites elsewhere in the park. The text of the document has been revised to omit the referenced statement.

18. The entire paragraph has been moved to the section labeled "Brief Description of the Park and Lake Crescent Area" and now appears under the subheading "Lake Crescent Watershed".

19. The statement is correct as written. Lake Crescent Lodge, Log Cabin Resort, and the Fairholm store all operate under a concession contract with the National Park Service.

20. At the time the draft plan was being prepared, the amphitheater at Fairholm campground was still used on a regular basis. Due to staffing cuts over the last several years, programs at the amphitheater have occurred less frequently. During the summer of 1995, evening programs were offered every Thursday and Saturday evening. In the summer of 1996, programs were offered every Friday and Saturday night. Programs were stopped in 1997 due to budget cuts, but will be restored if funding becomes available. The text of the document has been revised to more accurately reflect current conditions.

21. Campground use fluctuates based on weather conditions and tends to be highest during drier years when weather conditions are more favorable. Occupancy levels have dropped in recent years (see Appendix B) due to wet weather (Dan Mason, Lake Crescent District Ranger, pers. comm.). The issue statement regarding use of the Fairholm campground has been revised to more accurately reflect existing conditions.

22. This issue has been rewritten in the final plan to elaborate on the conditions that negatively affect the visitor experience in the Fairholm campground.

23. The document has been revised to delete the redundant statement. The majority of PWC meet the noise abatement standard contained in Section 3.7 (not Section 3.6) of the *Code of Federal Regulations* (this standard states that motorboats cannot exceed a noise level of 82 decibels at a distance of 82 feet [25 meters] from the vessel). However, many of the visitor complaints and comment letters received about PWC use on Lake Crescent concern the high pitch and erratic sounds generated by these watercraft as they rapidly accelerate and decelerate their engines and the cumulative noise they produce when operated in groups. Consequently, although PWCs may meet the regulatory noise standard, noise from these types of watercraft are an intrusion on other visitors and the serenity of the park environment.

Visitor safety is a concern with PWC use. PWCs do not have an impressive safety record (see Appendix A). They are considered easy to maneuver and nearly impossible to capsize, letting relatively inexperienced users attempt a variety of stunts (e.g., jumping waves, sharp turns) that would be impossible in a traditional motorboat. PWCs can also foster a false sense of security that may allow some operators to forget the basic rules of boating safety.

24. The National Park Service acknowledges that Barnes Point is more accurately located on the southeast shore of Lake Crescent. Topographic maps of the area indicate that Barnes Point offers some of the most level terrain to be found along the lakeshore. In both instances, the text has been revised to more accurately reflect existing conditions.

25. The text has been modified to incorporate the suggested change.

26. The text has been revised to indicate that a privately run tour boat, the *Storm King*, operated from Barnes Point during the summers of 1994 through 1996.

27. The National Park Service acknowledges that visitors from outside the local area also use Bovee's Meadow. However, based on observations made by Lake Crescent rangers over the years, the statement is more true than not, including the comment that the area is widely regarded among local users as a family-oriented area.

28. Over the years NPS rangers have received verbal complaints from Barnes Cove residents regarding PWC use of the area (Dan Mason, Lake Crescent District Ranger, pers. comm.). Conflicts arise when different user groups use the cove simultaneously. On days of heavy recreational use, it is not uncommon to see multiple users including swimmers, rafters, and boaters (PWC, sailboats, and motorboats) all vying for limited space in the cove. Buoys have helped push some of the congestion away from the shoreline, but conflicts among various user groups remain on busy days.

29. See response # 23. This issue has been reworded in the final plan to improve clarity.

30. The term "social trail" refers to an undesignated path that has formed due to repeated use by humans. Because these trails lack proper design and maintenance, their formation often leads to resource damage. Some of the more prevalent impacts associated with social trails include vegetation trampling and removal, barren ground, altered drainage patterns, and soil compaction and erosion. The sentence has been revised to improve clarity.

31. Heavy use of parking lots in the Barnes Point area occurs during periods of peak use, typically on weekends and holidays during the summer months (this occurs on approximately 20 days during a 90-120 day period). At such times parking lots fill to capacity and available spaces are extremely limited.

NPS management policies (NPS 1988) provide general guidance for the design of park facilities. These policies state that parking areas will be limited to the smallest size appropriate and be designed to harmoniously accommodate motorized and non-motorized vehicles and pedestrians. In addition, stabilized overflow parking areas should be provided where needed to accommodate peak visitation. Permanent parking areas should not be sized for peak use. Although these agency-specific policies offer general guidance, NPS design professionals must ultimately rely on their education and experience when designing park facilities.

32. The text has been revised to omit the word "several". The labels on the Log Cabin site map reflect commonly accepted names for the facilities shown. The cabins are located away from the shoreline and are structurally different from the A-frame "chalets" which are located next to the lakeshore.

COMMENTS AND RESPONSES

33. The Log Cabin Resort is open from mid-winter through late fall, and is closed for some of the winter. The text has been revised to more accurately reflect existing conditions.
34. The text has been revised to indicate that the area in front of the lodge is typically used as a day-use area while the shoreline near the RV camping area and the area in front of the A-frames is used primarily by overnight visitors to the resort.
35. Specific signs of overuse in the RV area include erosion along the shoreline where boats are pulled up on the beach, and loss of riparian and shoreline vegetation caused by visitor use. The text has been revised to clarify that the mouth of the creek is adjacent to the RV area, not in the RV area.
36. Several park biologists have observed trampled stream banks and missing streamside vegetation along Log Cabin Creek. These impacts are attributed to human use of the area, though written documentation has not been made.
37. Resource impacts associated with visitor use of the RV campground area are apparent and include soil erosion and loss of wildlife habitat within the riparian zone of Log Cabin Creek and along the lakeshore. The text has been revised to clarify this issue. These impacts have been noted by park biologists as indicated in response # 36.
38. The National Park Service has no plans to preserve any of the buildings at Log Cabin Resort. As the park's *Historic Building Inventory* (NPS 1984d) indicates, the Log Cabin Resort Group is ineligible for the National Register of Historic Places because of the loss of integrity in overall design, setting, materials, and association. Newer replacement of doors, windows, and siding on several of the cabins are not similar to the original design and materials. Several of the older buildings in this resort ensemble have been moved from their original location. The overall siting of the structures amongst trailer sites and new contrasting units detracts from the historical integrity of the building group.
39. There is no NPS standard that addresses consistency of architectural style within a national park setting. NPS management policies (NPS 1988) provide general guidelines in decisions regarding historic structures. In addition, the park's *Visual Themes Manual* (NPS 1989b) offers a set of general and specific guidelines for developing designs and maintenance procedures for park facilities.
40. The long-term vision for Log Cabin Resort can be found in the park's *Visual Themes Manual* (NPS 1989b). This document presents guidelines for the evolution of the resort. As with other resorts at Lake Crescent, the manual includes a visual theme for the resort, a brief history, and guidelines for the appearance of the buildings and site/setting. The following information regarding Log Cabin Resort is excerpted from the *Visual Themes Manual*:

Log construction shall be emphasized in the buildings, support facilities, and site furniture at the resort. This shall be continued even though the original historic log structures no longer exist.

The log theme shall be used in site development as well...Additional permanent structures are not permitted along the lakeshore. The long-term objective is to reduce construction along the shore and to restore the area to a more natural appearance.

41. The National Park Service acknowledges that La Poel campground was not closed due to failure of the septic system. The text has been revised to correctly state that this campground was closed following construction of the Fairholm campground. Closure of the La Poel campground was an administrative decision based partly on economic considerations.
42. Statements regarding the impacts of human use in the La Poel area are based on direct observations by NPS personnel, including park biologists and Lake Crescent rangers.
43. Statements asserting that East Beach is heavily used during the summer months and that the area is predominantly used by Clallam County residents are based on direct observations by Lake Crescent rangers over the years.
44. Due to the road's steep grade (15 percent), travel along the access road to the East Beach day-use area is difficult for RVs and is therefore not recommended.
45. The issue in question has been revised in the final document to clarify that there are two separate issues of concern: (1) Although wave action from winter storms appears to contribute to erosion of the lakeshore at East Beach, park staff believe that this erosion may be exacerbated by the proximity of parking to the shore, which has eliminated lakeshore vegetation and increased the susceptibility of exposed soils to erosion; and (2) The vault toilets at East Beach are pumped out on a regular basis; however, they frequently experience odor problems as a result of heavy use during the summer months.
46. The National Park Service refers to the Lyre River Road as that portion of the road beyond the junction with the Piedmont Road and extending to the east trailhead of the Spruce Railroad trail. Suggested changes have also been made to the document's text to improve clarity.
47. The characterization of the North Shore (with the exception of the Spruce Railroad trail) as the least heavily used of the plan's six management areas is based on observations by Lake Crescent rangers over the years, as is the statement that the picnic area is not heavily used. The annual number of Spruce Railroad trail users has not been measured and is unknown. Park staff believe that the actual use figure is considerably lower than 20,000 visitors per year. Since the North Shore Road is a gravel road, it is quite likely that many visitors, particularly those in large RVs, may not feel comfortable driving on it.
48. The text has been modified to incorporate the suggested change.
49. The most likely cause for the soil erosion observed along the bank is from the presence and use of social trails and a lack of stairs to channel foot traffic along a designated path. These claims are based on direct observations by NPS personnel, including park biologists and Lake Crescent rangers. Because social trails lack proper design and maintenance, their formation often leads to resource damage. Some of the more prevalent impacts associated with social trails include vegetation trampling and removal, barren ground, altered drainage patterns, and soil compaction and erosion. The text has been revised to improve clarity.
50. The text has been modified to incorporate the suggested change.

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51. References to the *Storm King* boat tour and the frequency of evening programs at the Fairholm campground have been revised throughout the document to reflect existing conditions. Evening programs at Fairholm campground were not offered in 1997 because of budget constraints, but were offered two evenings per week during the summers of 1995 and 1996. Evening programs at Fairholm will be restored if funding for adequate staffing becomes available. As a result of editing, the entire paragraph, including the referenced text has been deleted and the information incorporated into relevant sections of the "Affected Environment".

52. Reference to the *Storm King* tour boat has been deleted. The remaining three concession operations at Lake Crescent (Fairholm Store, Lake Crescent Lodge, and Log Cabin Resort) are each managed under a concession contract. This information has been moved to the "Affected Environment" section of the plan and appears under the heading "Concession Operations/Non-Profit Organizations".

53. The National Park Service has exclusive jurisdiction over that portion of U.S. 101 within Olympic National Park. However, through a cooperative agreement between the Park Service and the Washington State Department of Transportation, the state is responsible for road maintenance on the highway including surfacing, striping, drainage, snow removal, signage, guardrails, bridges, retaining walls, storm damage repair, vegetation control along the road shoulders and maintenance of pullouts. The cooperative agreement expires in 1998. Park staff and WSDOT staff have cooperated well in addressing all of the maintenance concerns on U.S. 101 at Lake Crescent, and it is anticipated the cooperative agreement will be renewed with little, if any, revision.

A sense of entry into Olympic National Park is currently lacking along U.S. 101 with many motorists unaware that they have entered a national park. To improve the sense of entry into the park, the National Park Service is proposing to install attractive entrance signs along the highway at the park's east and west boundaries. This issue statement has been revised in the final plan to delete reference to private residences along the lakeshore.

54. The text has been revised to incorporate the suggested change. The term "interpretive opportunities" implies that there are many different ways to help visitors better understand the natural and cultural history of Lake Crescent. The messages include everything from prehistory to history of the development of the lake to lake ecology and otter biology. The methods of interpreting this information range from information kiosks and wayside exhibits to using park interpretive rangers to rove trails and present evening programs at lodges and campgrounds.

The overall interpretive program for the Lake Crescent area has been chronically underfunded. The seasonal interpretive staff has steadily declined over the last several years and the hours of operation for the Storm King Ranger Station have been curtailed.

55. NPS management policies (NPS 1988) provide general guidance in decisions regarding provision of park facilities. These policies state in part that visitor facilities provided by the National Park Service and its concessioners will be harmonious with park resources, compatible with natural processes, aesthetically pleasing, and will be integrated into the park landscape and environs so as to cause minimum impact. The park's *Visual Themes Manual* (NPS 1989b) identifies more specific goals and guidelines that reflect a design theme for park facilities that is in keeping with the natural setting and historic character of the Lake Crescent area. For example, one goal is recreating a rustic log structure character in any future changes to

the Log Cabin Resort. This character would be in keeping with the first Log Cabin Hotel constructed in 1895.

Park resources as well as the visitor experience could be affected by future expansion of concession facilities in the Lake Crescent area. Specific impacts would be determined by the nature of future expansion proposals. The plan identifies particular actions regarding development of concession facilities that would avoid or minimize potential impacts. For example, the plan states that any new structures at Log Cabin Resort would be sited away from the shoreline, thereby improving the visual experience for the visitor by creating a more natural shoreline appearance. Impacts associated with proposed changes to concession operations are discussed under each alternative in the "Environmental Consequences" section of the plan. As detailed site designs are developed, further environmental analysis would be completed.

56. The National Park Service recognizes that bicycles offer an alternate form of transport to Lake Crescent in lieu of automobiles. Most cyclists would agree that narrow road shoulders, limited sight distance, and commercial truck traffic pose hazardous conditions for cyclists, conditions that are prevalent along U.S. 101. In the interest of safety, the National Park Service would like to provide cyclists with an alternate route to Lake Crescent to avoid the need to travel along the highway. Hiking, horseback riding, and motorboating generally do not constitute methods of visitor transport to the lake and therefore are not addressed under this heading.

57. The National Park Service agrees that all lakes within the management area are natural. Public comments received on the draft plan indicate that some of the values visitors wish to see protected within the watershed include serenity of the lake environment, pristine water quality, and the presence of high quality natural, historic, and scenic resources. These values are to be protected through NPS management efforts and are to be guided by direction set forth in this plan. As a result of editing, the entire paragraph, including the referenced text has been deleted from the document.

58. Annual visitation statistics for Olympic National Park and other areas of the North Olympic Peninsula show a continuing increase in use over time (see response # 1 and # 101). Statements addressing the increase in water recreation on Lake Crescent in recent years are based on observations by Lake Crescent rangers of parking lot, boat ramp and other recreation-related facilities, as well as numbers of boats on the lake. This observed increase is correlated with the overall increase in visitation to the park.

59. The text has been revised to omit the word "several". Public comment received on the draft plan documents numerous instances where park visitors have had their experience negatively affected by PWC use on Lake Crescent. A sample of these comment letters appears in the "Comments and Responses" section of this document.

The National Park Service acknowledges that regulations currently exist to guide watercraft use on Lake Crescent. The statement, "in the absence of any limitations to use of the lake" was not meant to imply that a lack of boating regulations exist, but rather that watercraft are not restricted from using any part of the lake. This phrase has been deleted from the document to eliminate ambiguity.

Regarding the issue of noise abatement and the effect of PWC use on park visitors in the Lake Crescent area, see response # 23.

COMMENTS AND RESPONSES

60. See response # 2 regarding "increased recreational use" of Lake Crescent.

Since publication of the draft plan, the park superintendent has reevaluated the use of PWC on Lake Crescent and has determined it to be an inappropriate use of Olympic National Park. Therefore the National Park Service will not use PWCs to patrol Lake Crescent.

61. The park is interested in preventing the deterioration of the watershed's high water quality. Objective # 1 is consistent with legislation, NPS policies, the purposes of the park, the 1976 *Master Plan*, and the park's vision for Lake Crescent; provides for the perpetuation of natural and cultural resources; and allows for a variety of appropriate recreational activities in the Lake Crescent watershed.

62. The superintendent is mandated by law to protect park resources. "Compatible with the protection of park resources and values" means that where conflict exists between visitor use and resource protection, protection of the resource must come first. The park cannot be all things to all people; all uses cannot be accommodated.

As an example, PWC use on Lake Crescent has been determined to pose a potential threat to park resources and values and adversely affects the experience of other park visitors, particularly those seeking a resource-based experience dependent on a national park setting (see Appendix A). Therefore, the continued use of PWCs on Lake Crescent is deemed an inappropriate use of the lake and will no longer be permitted.

63. The term "old-growth forest" refers to a complex forest community characterized by the presence of large, old trees (200 years and older), a multi-layered canopy (trees of varied size, species and age), standing dead trees or "snags" and extensive amounts of large woody debris on the forest floor.

64. The lake's trout populations are unique in that they mature at a much larger size than other resident trout populations in western Washington. The rainbow (Beardslee) have distinctive coloration and shape (blue back, large mouth), and both of Lake Crescent's trout exhibit unusual spawning habits. The rainbow spawn in the lake outlet while some of the cutthroat (Crescenti) spawn from the lake outlet downstream up to two miles from the lake. Outlet spawners are rare among trout in Washington. When first described in the late 1800s, the lake's rainbow and cutthroat were identified as new subspecies. Later it was concluded that they were locally adapted populations of coastal cutthroat and rainbow. There are two populations of Crescenti in the lake, but hybridization is only suspected to have occurred in those that spawn in Barnes Creek and not in those utilizing the Lyre River.

The description of fish appearing on page 45 of the draft plan has been modified to include the five species which are found in the lake: Beardslee, Crescenti, kokanee, prickly sculpin, and pygmy whitefish.

At one time, lakes Crescent and Sutherland were connected and the fish in both lakes are believed to have had access to the ocean via Indian Creek and the Elwha River. Therefore, the Lake Crescent kokanee, rainbow, and cutthroat are suspected to have originated from anadromous populations of Elwha sockeye, steelhead, and coastal cutthroat trout, respectively. Tabor (1987) describes the geological evidence for this connection and the large landslide which separated the two lakes. Other anadromous fish from the Elwha may have utilized Lake Crescent but sockeye, steelhead, and cutthroat are most adept at establishing resident populations.

65. "Improvement" means that some changes will be made in how visitors receive orientation to the Lake Crescent area, and to park facilities and services available. Park staff currently evaluate visitor orientation, interpretation, and other visitor services. A wide range of measures is used, including observation of visitor activities, appearance and timeliness of bulletin board information, monitoring of evening programs, inspection of restrooms, and visitor comments received by rangers.

The Government Performance and Results Act (GPRA) of 1993 requires that federal agencies measure results as outcomes, not as outputs of effort. For example, numbers of visitors served is an output, while visitor satisfaction with service is an outcome. The park recently completed a new strategic plan that describes how Olympic's long-term and annual goals will be measured. There are no requirements of GPRA that must be addressed in the *Lake Crescent Management Plan/EIS*.

66. The Storm King Ranger Station has been known by several names throughout its history, depending on the year, the cabin's function at the time, and the agency managing it. Some of its former names include: Storm King Information Station, Morgenroth Cabin, Storm King Guard Station, the Forest Service Visitors Center, and the Old Forest Service Visitors Center.

67. The "historic setting and character of the area" refers to the larger area or environment in which a historic property is located. It may be an urban, suburban, or rural neighborhood or a natural landscape in which buildings have been constructed. The relationship of buildings to each other, as well as setbacks, fence patterns, views, driveways and walkways, and street trees create the character of a district or neighborhood (NPS 1995b).

68. The National Park Service acknowledges the rights of private landowners, but because their property lies within park boundaries, the Park Service is required to address the rights of *all* interested parties, not just landowners. A number of laws, policies, and directives require park managers to minimize the impact of development upon park resources and the visitor experience. This process does not conflict with section 255 of 16 *United States Code*, Chapter 1.

69. The objective quoted from the draft plan is # 13. This objective means that through (1) documenting the natural and cultural resources of the area (inventory), (2) documenting their status and changes that may be occurring (monitoring), and (3) explaining their importance, relevance and value to the public (interpretation), the public will cherish these resources and be active participants in their safekeeping.

70. Although site-specific information on air quality is lacking for the Lake Crescent watershed, air quality is monitored nearby in Port Angeles and on Hurricane Ridge. Given the proximity of these areas to Lake Crescent, data obtained from these monitoring stations can provide some indication of the overall air quality in the Lake Crescent watershed. In the absence of site-specific information, it is the best data available for the planning area.

71. The National Park Service agrees that the statements in this paragraph are largely hypothetical. This, indeed, is the intent, for without hypotheses being made, good science cannot follow. The National Park Service believes that it would be irresponsible to ignore the fact that emission sources, which have been documented to cause pollution elsewhere in the world, are present near Lake Crescent and should be monitored so that problems, if any, can be mitigated.

COMMENTS AND RESPONSES

72. The National Park Service agrees that there is a lack of factual information regarding air quality in the Lake Crescent airshed. The intent of the discussion is to point out that good information is not available, that sources of potential air pollution do exist in the area, and that further study is warranted to preclude or mitigate such potential pollution.

73. The document text has been changed to indicate that a series of massive landslides, rather than only one, separated Lake Crescent from present-day Lake Sutherland. The reference for this statement is as follows:

Logan, Robert L. and Robert L. Schuster. 1991. *Lakes Divided: The Origin of Lake Crescent and Lake Sutherland, Clallam County, Washington*. Washington Geology. vol. 19, no. 1.

74. The National Park Service acknowledges that 585 feet is an incorrect value for the lake's surface elevation. A usually reliable reference, *Lakes of Washington* (Washington State Department of Ecology 1973), lists the lake level as 580 feet, mean sea level. This figure, however, is based on "...taking into consideration the nearest contour line on a topographic map", so it too can only be regarded as an estimate. The National Park Service readily accepts Mr. Greene's estimate of 575 feet during the tourist season as being credible. The text of the document has been modified to reflect this change.

75. The watershed map referred to appeared on page 6 of the *Draft Lake Crescent Management Plan/EIS*. The National Wetlands Inventory maps referred to on page 40 of the draft plan are published by the U.S. Fish and Wildlife Service and are available for purchase.

76. The water quality studies referred to in the first sentence on page 40, paragraph 1 of the draft plan include the *Lake Crescent Water Quality Status Report: 1984-1989* (NPS 1989a) and *Trophic Status and Assessment of Non-Point Nutrient Enrichment of Lake Crescent, Olympic National Park* (NPS 1991a). Both citations have been added to the document's bibliography. Both documents are available for review in the park's library.

All of the information presented under this subheading deals with some aspect of water quality within the Lake Crescent watershed, including findings from previous studies and a listing of potential threats to water quality.

77. The draft plan clearly states that drain fields and septic tanks close to the shoreline are at *risk* of exposure as a result of erosive forces associated with extreme winter storms. The text also clearly indicates that previous studies have shown no evidence of septic source "enrichment". The document does not state that septic systems are failing, only that they are a *potential* source of water pollution.

78. As noted in the response to # 77, the draft plan does not say that septic systems are failing, nor does it state that hydrocarbon leaks or spills have been documented. The sentence on page 41 of the draft plan intended to list "failing septic systems" and "spills or leaks from existing gas pumps, and gas tanks on motorized watercraft" as items in a list of *possible* sources of pollution. The sentence has been revised to eliminate ambiguity.

It is an observable fact that trucks containing petroleum products and other hazardous materials pass through the Lake Crescent area. This is not the kind of information that is ordinarily subject to documentation by the park.

79. The paragraph clearly states that the information is generalized from information gathered adjacent to the park. It is the best information available.

80. See response # 74.

81. The "Affected Environment" section of the plan describes that portion of the natural and human environment of the Lake Crescent area that may be affected by, or that could affect proposals under consideration. Providing a description of all fires occurring in the management area since 1938 does not satisfy the above criteria. This information is available from the park's Fire Management Office upon request.

82. Nothing in the statement mentions "wholesale clearing of the shoreline for construction". It merely states that much of the private land was cleared for building construction.

World War I was fought between 1914 and 1918. Construction of the Spruce Production Division Railroad No. 1 occurred between July, 1918 and November, 1918 (Evans and Williams 1984).

The volume figure provided on page 43 of the draft plan is incorrect. In his book, *Olympic Battleground*, Carsten Lien estimates that a total of 100 million board feet of timber were removed from the entire park between 1941 and 1958. The text has been revised to state that Olympic National Park records from 1953 to 1957 indicate that approximately seven million board feet of timber were removed from the township (T30N R9W) containing the Lake Crescent watershed.

83. This rough description of the forest stands was derived from the park's Geographic Information System databases and is based on tree size classes.

84. The following is a list of rare vascular plants known to occur in the Lake Crescent area. The list has been compiled from botanical surveys conducted by the park's natural resource management staff.

Agrostis exarta var. monolepsis (Spiked bentgrass)
Status: ONP Very-Rare
Location: Lake Crescent outlet T 30 N, R 9 W, Sec. 14
Elevation: 580 ft.
Habitat: Moist

Dryopteris arguta (Coastal wood fern)
Status: ONP Very-Rare
Location: Reported from Lake Crescent
Elevation: Unknown
Habitat: Unknown (Dry)

Claytonia exigua ssp. glauca (Pale springbeauty)
Status: ONP Rare
Location: T 30 N, R 9 W, Sec. 23
Elevation: 585 ft.
Habitat: Rocky

Epipactis gigantea (Giant helleborine)
Status: WNHP-listed Sensitive
Location: East Beach, Barnes Point T 30 N, R 9 W,
Secs. 13, 19, 26
Elevation: 580 ft.
Habitat: Wet

COMMENTS AND RESPONSES

Isoetes occidentalis (Western quillwort)

Status: ONP Very-Rare
Location: Multiple populations within Lake Crescent
Elevation: 580 ft.
Habitat: Wet

Lactuca biennis (Tall blue lettuce)

Status: ONP Very-Rare
Location: Reported from Lake Crescent
Elevation: Unknown
Habitat: Moist

Lobelia dortmanna (Water lobelia)

Status: WNHP-listed Threatened
Location: T 30 N, R 9 W, Secs. 14, 26
Elevation: 580 ft.
Habitat: Wet

Ludwigia palustris (Marsh false loosestrife)

Status: ONP Very-Rare
Location: T 30 N, R 9 W, Sec. 16
Elevation: 585 ft.
Habitat: Wet

Pentagramma triangularis* ssp. *triangularis (Goldback fern)

Status: ONP Rare
Location: T 30 N, R 9 W, Sec. 23; T 30 N, R 8 W, Sec. 32
Elevation: 585 ft.
Habitat: Open

Polemonium carneum (Great polemonium)

Status: WNHP-listed Threatened
Location: T 30 N, R 9 W, Sec. 34(?)
Elevation: 600 ft.
Habitat: Open

Potamogeton filliformis (Slender-leaved pondweed)

Status: ONP Very-Rare
Location: T 30 N, R 9 W, Sec. 26
Elevation: 580 ft.
Habitat: Wet

Potamogeton illinoensis (Illinois pondweed)

Status: ONP Very-Rare
Location: T 30 N, R 9 W, Sec. 14 (also reported from Barnes Point)
Elevation: 580 ft.
Habitat: Wet

Rubus nivalis (Snow bramble)

Status: ONP Rare
Location: Reported from Lake Crescent
Elevation: Unknown
Habitat: Unknown

85. The park's catalogue of exotic plants, titled *Management of Exotic Plants in Olympic National Park*, is an unpublished and evolving document that is far too massive to reproduce for distribution. The document is available for public inspection at park headquarters.

86. The park's *Resource Management Plan* is also an unpublished document that is far too extensive to reproduce. This document is available for public inspection at park headquarters.

87. Copies of the NPS monograph, *Mountain Goats in Olympic National Park: Biology and Management of an Introduced Species*, provides the documentary evidence requested. Copies of the monograph are available from the park upon request.

88. The sentence in question is an accurate statement; it has been revised to improve clarity.

89. The description of fish appearing on page 45 of the draft plan has been modified to include the five species which are found in the lake: Beardslee, Crescenti, kokanee, prickly sculpin, and pygmy whitefish.

Bryan Pierce conducted several projects on Lake Crescent as part of his Masters Thesis (1984). As part of his thesis, he gathered and summarized hatchery planting records from the Lake Crescent hatchery and from other facilities that released fish into the lake. He found planting records for the following fish: rainbow (Beardslee, Kamloops, and various unidentified strains), steelhead, cutthroat (Crescenti, Westslope, Yellowstone, and various unidentified strains), coho, sockeye, kokanee, lake trout, and brook

trout. The strongest evidence for hybridization also comes from Pierce's thesis. He conducted a morphometric assessment (counts and measurements of various body parts) of the Beardslee and both Crescenti populations and concluded that the cutthroat spawning in Barnes Creek were very likely influenced by the hatchery plants while the two outlet spawning populations did not hybridize. Park staff are currently conducting a genetic assessment of these three populations which should provide more conclusive data regarding the origin and degree of hybridization.

90. The decision to adjust the minimum size up to 20 inches was based on the same management approach being used for other wild trout populations in the state of Washington (but not in lakes that receive hatchery plants, which comprise the great majority of lakes in the state). This management scheme is commonly used where there are not yearly estimates of the population size and catch, which is the case at Lake Crescent. Where population and catch information is lacking, the minimum size limit is set at the average length of mature females to allow the majority to spawn at least once before they can be caught. For most wild trout, this size is 12-14 inches. However, data gathered from a trap operated in the Lyre River in the 1950s indicated that Beardslee females matured at 18-20 inches. No length measurements were collected for the Crescenti. Data currently being collected by park staff support the 1950s data and indicate both species have similar sizes at maturity.

91. No it is not true that the northern spotted owl has been removed from the threatened list; it remains listed as a threatened species by the U.S. Fish and Wildlife Service.

92. The archeological remains referred to here are historical archeological remains at Lake Crescent Lodge and at Anderson's (an old homestead site) on the Spruce Railroad trail.

93. Currently accepted models of Native American land use practices, combined with the fact that the National Park Service continues to find prehistoric archeological sites in a wide variety of settings, such as Lake Ozette and in the subalpine zone, lend strong support to the argument that Native Americans used the shores of Lake Crescent. It is likely that the major reason the park has not documented similar sites around Lake Crescent is because very little systematic survey and testing has been completed.

Regarding the statement that "no archaeological remains associated with Lake Crescent prehistory were found", see response # 17.

The second paragraph under the heading "Lake Crescent Prehistory" has been moved to the section labeled "Euroamerican Settlement of Lake Crescent".

There is no contemplated, planned, or desired investigations for archeological surveys of the lakeshore at this time. There is no use of heavy equipment planned. There is no indication in this paragraph that heavy equipment will be used. Archeological testing is generally done by digging a 50 centimeter to 1 meter test pit and screening the dirt from the pit. The depth of the pits would be 20 to 40 centimeters. The term "intensive" means that the pits might be placed every 10 to 20 meters. The holes are dug by hand and the excavated sediment is placed on tarpaulins until the hole is completed. The pits are then carefully backfilled. Excavation of these holes produces less disturbance than a blown-down tree or many other types of natural disturbance.

COMMENTS AND RESPONSES

94. Ethnographic accounts show Native Americans were throughout the park. These accounts have been reinforced by archeological surveys performed in the park interior. There has been much confusion concerning the word "taboo"; the term "sacred" more accurately portrays the concept. In European and Euroamerican culture, places such as shrines, memorials, and historic sites are deemed important and are regarded and treated in special ways. Because these sites are important, certain prescribed activities are considered appropriate in them. This type of feeling and behavior is probably closer to the Native American concept which is sometimes described as "taboo". Thus there is no reason to think that this account is evidence of no Native American presence at Lake Crescent.

95. References dealing with construction of the Spruce Railroad have been checked.

96. Within the park the structure is officially known as the Storm King Ranger Station. The cabin has been known by several names throughout its history, depending on the year, the cabin's function at the time, and the agency managing it. Some of its former names include: Storm King Information Station, Morgenroth Cabin, Storm King Guard Station, the Forest Service Visitors Center, and the Old Forest Service Visitors Center. The second sentence has been revised to eliminate ambiguity.

97. The discussion presented in the draft plan was not meant to be misleading. The document clearly states that the National Park Service used as much of the original materials as possible when reconstructing the cabin. The cabin's interior incorporated original building materials, while the exterior used new materials.

98. Both names are commonly used to refer to this road. A change in the name "North Shore picnic area" to "Ovington picnic area" would require a petition to the U.S. Board of Geographic Names, administered by the U.S. Geological Survey. The park has no plans to petition for this change.

99. See response # 17.

The statement indicating the discovery of a historical artifact scatter within the Lake Crescent Lodge Historic District is accurate. The specific nature of the site along with its location are not disclosed to the public to protect the integrity of the site.

100. The text has been modified to incorporate the suggested change.

101. The referenced data now appear in Appendix B of the final plan. Visitation to Lake Crescent, Olympic National Park and the North Olympic Peninsula has shown an overall increase in recent years (see Appendix B). While visitation levels may dip for a period of months or several years, the overall trend has been a growth in use of the park and peninsula.

The data presented on page 52 of the draft plan have been updated to provide visitation statistics for only one period.

102. The draft plan cites information gathered for a tourism market analysis prepared in February 1995 by Dean Runyan Associates for the North Olympic Visitor and Convention Bureau. In the spring and fall of 1994, as part of this analysis, Dean Runyan Associates surveyed a total of 995 North Olympic Peninsula visitors. The survey gathered a variety of information, including visitor origin. It is true that no visitor surveys specific to Lake Crescent have been conducted; the draft document refers only to information

gathered about visitors to the North Olympic Peninsula. The document text has been revised to include this citation.

103. The intent of the second sentence (which is a complete sentence as written) is to present data relevant to visitor use patterns on the North Olympic Peninsula, as found in the *Tourism Market Analysis, North Olympic Peninsula* (Dean Runyan Associates 1995). The document text has been revised to include this citation.

104. Data supporting the statements on length of stay can be found in the *Tourism Market Analysis, North Olympic Peninsula* (Dean Runyan Associates 1995). The document text has been revised to include this citation.

105. Data supporting the statements on party size can be found in the *Tourism Market Analysis, North Olympic Peninsula* (Dean Runyan Associates 1995). The document text has been revised to include this citation.

106. Information on use levels at the various swimming beaches is based on observations made by park staff over the years. The sentence regarding the predominant users of the Fairholm swimming area has been deleted from the document's text. A change in the name "North Shore picnic area" to "Ovington picnic area" would require a petition to the U.S. Board of Geographic Names, administered by the U.S. Geological Survey. The park has no plans to petition for this change.

107. The text has been modified to incorporate the suggested changes and to more accurately reflect existing conditions. The park's *Water Safety Plan* (NPS 1994) serves as an operational guide for all watercraft on Lake Crescent; state and federal boating regulations are followed in the plan.

108. The text has been revised to incorporate the suggested change.

109. The National Park Service acknowledges that La Poel campground was not closed due to failure of the septic system. The text has been revised to correctly state that this campground was closed following construction of the Fairholm campground. Closure of the La Poel campground was an administrative decision based partly on economic considerations. No written documentation of this decision exists.

110. Log Cabin Resort is currently open from mid-February through late December although the National Park Service acknowledges that these dates are subject to change in the future. The text has been revised to incorporate the suggested change regarding the presence of a restaurant.

111. The text has been revised to incorporate the suggested change.

112. Reference to multi-year trends in traffic volumes on the North Olympic Peninsula has been deleted from the final plan. Traffic volumes on the North Olympic Peninsula vary considerably according to season and are directly influenced by recreational traffic during the summer months. The sentence regarding traffic composition has been revised to incorporate the suggested change. WSDOT traffic counts for U.S. 101 for the period 1991-1996 show a stable level (with yearly fluctuations of 50-100 cars per day) in average daily traffic around Lake Crescent. See appendix B for further information.

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113. Reference to the accident rate along this section of U.S. 101 has been omitted from the final plan. The information on traffic accident rates which appeared in the draft plan can be found in *Washington State Highway Accident Report*, published by the Washington State Department of Transportation. Copies of this report are available from the Department of Transportation.

As stated in the draft document on page 56, "in many places, there are no shoulders and most vehicles do not have adequate room to negotiate around cyclists without risking collisions with oncoming vehicles. Additionally, limited sight distance on the more winding sections may cause vehicles to come upon bicycles without warning." Most cyclists would agree that such situations pose hazardous conditions for cyclists, conditions that are prevalent along U.S. 101.

114. The referenced text is not meant to imply that two different standards exist (one for private landowners and another for the National Park Service), or that there is general conflict between landowners and visitors. This paragraph has been revised in the final plan to state that "in accordance with current Department of the Interior policy, in the absence of incompatible threats, acquisition will only be done when a willing seller, willing buyer situation exists" (NPS 1984a).

See response # 2 regarding increased recreational use of Lake Crescent.

115. References to the *Storm King* boat tour and the frequency of evening programs at the Fairholm campground have been revised throughout the document to reflect the current situation. Evening programs at Fairholm campground were not offered in 1997 because of budget constraints, but were offered two evenings per week during the summers of 1995 and 1996. Evening programs at Fairholm will be restored if funding for adequate staffing becomes available. As a result of editing, the entire paragraph, including the referenced text has been deleted and the information incorporated into relevant sections of the "Affected Environment" under the subheading "Recreational Opportunities".

116. As suggested, the text which appears under the heading "Air Quality" has been revised to enhance clarity and eliminate conflicting statements; impacts related to geology and soil disturbance have been moved to the relevant impact topic.

117. The National Park Service shares your concern about the potential for hydrocarbon runoff and altered drainage patterns resulting from paving activities. Individual site plans for each management area and construction specifications for all proposed facilities and structures would incorporate mitigative measures to avoid or minimize such impacts. Some of the measures to be employed can be found in the "Alternatives, Including the Proposed Action" section of the final plan under the heading "Mitigation Measures and Development Constraints". These actions include ensuring that runoff and sediments from project sites do not enter creeks, streams, and other bodies of water and may involve the installation of catchment devices similar to the type described.

Construction of a multi-use facility at Lake Crescent Lodge would occur on a previously disturbed site. Note that this facility is not included in the NPS proposed action (Alternative A); it is only contained in Alternative C.

118. The draft document does not state that a waterproof surface would be used on the Spruce Railroad multi-purpose trail. On the contrary, the preferred surface material would be one that was hard-packed, yet

permeable to water. The length of the trail subject to surfacing would be four miles, not 13.8 miles, and would occupy previously disturbed ground. As noted on page 60 of the draft plan, the amount of excavation required to achieve a stable backslope (cutslope) would be considerable. However, to mitigate such impacts, disturbed areas would be revegetated with native species and restored to natural conditions wherever possible.

119. The addition of walk-in campsites along the Spruce Railroad trail has been deleted from the NPS proposed action (Alternative A). Increased day use of the Spruce Railroad trail is not expected to result in a vastly increased fire hazard along the trail. It is expected that the primary increase in use will be from cross-country users, who, based on the experience of park staff, are not typically associated with increased fire incidence. Fire is a concern throughout all of the Lake Crescent watershed and the park will continue to work with landowners and educate visitors to prevent human-caused fires.

The NPS proposed action has been modified to state that within the scope of existing or future concession contracts, the National Park Service may investigate the feasibility of increasing the number of units (rooms) at Lake Crescent Lodge by a maximum of 10 percent (a total of six units). To help minimize impacts on the surrounding forest, construction would be limited to previously disturbed sites wherever possible.

Since publication of the draft plan, creation of a buoyed swimming area at Bovee's Meadow has been deleted from the NPS proposed action (Alternative A). In addition, the National Park Service would explore the possibility of establishing tent sites at the west end of La Poel to help offset any loss of campsites at Fairholm and Log Cabin. The east end of La Poel would remain a day-use area.

Because the plan does not provide detailed site designs for any given management area, but instead proposes a general direction for visitor development and resource protection throughout the watershed, a general analysis of environmental impacts is provided. Consequently, before implementing some actions, further environmental analysis may be necessary. In each case, compliance with all laws, regulations, and policies would be carried out before any action is undertaken. As a detailed site design is developed for the Log Cabin area, further environmental analysis would be completed, including a more in-depth analysis of the natural resource impacts associated with building construction and demolition.

120. Construction of a multi-use facility at Lake Crescent Lodge was never part of the NPS proposed action (Alternative A). Since publication of the draft plan, the NPS proposed action has been modified to state that within the scope of existing or future concession contracts, the National Park Service may investigate the feasibility of increasing the number of units (rooms) at Lake Crescent Lodge by a maximum of 10 percent (a total of six units). To help minimize the loss of wildlife habitat, construction would be limited to previously disturbed sites wherever possible. Also, see paragraph above.

121. As noted in response # 38, the National Park Service has no plans to preserve any of the buildings at Log Cabin Resort. This is based on the determination that the resort is ineligible for the National Register of Historic Places due to a loss of integrity in overall design, setting, materials, and association. Because the resort does not qualify as a historic property, no further action is required under the National Historic Preservation Act.

COMMENTS AND RESPONSES

The National Park Service acknowledges that both the Rosemary Inn and Lake Crescent Lodge were never silent and devoid of recreational use. The noise of a motor-powered ferry boat or fishing boat moving from one point to another is definitely part of the historic use of the lake. What is new and what many people find intrusive on the historic districts is noise from PWCs being operated in front of the historic lodges.

Many commenters on the draft plan concur with the statement that noise associated with the use of motorboats and particularly PWC have a negative impact on the peaceful atmosphere of both the Rosemary Inn and Lake Crescent Lodge Historic Districts. The document has been revised to delete the reference to "unrestricted" use of motorboats and personal watercraft.

122. Since publication of the draft plan, both the addition of walk-in campsites along the Spruce Railroad trail and construction of a multi-use facility at Lake Crescent Lodge have been deleted from the NPS proposed action (Alternative A). The proposed action has also been modified to state that within the scope of existing or future concession contracts, the National Park Service may investigate the feasibility of increasing the number of units (rooms) at Lake Crescent Lodge by a maximum of 10 percent (a total of six units). The National Park Service does not anticipate that such construction would have a significant effect on management of the Lake Crescent area.

123. Lake Crescent does not lie within designated wilderness and the plan does not propose to manage it as such. The lake would continue to be managed for a diversity of recreational uses that are compatible with the preservation of park resources and the serenity of the lake environment. Except for a prohibition on PWC use (justification for this ban is contained in Appendix A), all other current uses of the lake would continue. Only a small percentage of lake users would be negatively affected by the ban on PWCs.

124. Park entrance fees are set servicewide by the NPS Washington office. The NPS fee collection guideline (NPS-22) offers guidance to parks in administering their fee collection programs. It states that "the National Park Service shall not charge excessive fees that have the effect of excluding persons based on their economic status" (NPS 1989c). It further directs parks to set overnight camping fees so as to be comparable to those charged by other area campgrounds, including those operated privately and by county, state and local governments. Olympic National Park conducts a campground fee comparability study periodically and sets its campground fees accordingly. The plan proposes to maintain a range of overnight accommodations, including camping facilities in the Lake Crescent area.

125. The National Park Service acknowledges that natural events such as those mentioned contribute to shoreline erosion in addition to those impacts that can be attributed to visitor use. The text has been modified to correct this omission.

Questions regarding noise and safety concerns associated with PWC use have been addressed previously in response # 23.

126. Trail locations would be determined as part of the overall trail plan to be developed, and in conjunction with the site design process for the Barnes Point area.

127. The plan does not propose the construction of additional administrative facilities in the Lake Crescent area. On the contrary, it proposes to adaptively reuse existing structures (the NPS-owned "Carter House") to avoid the need for new construction.

The National Park Service believes that installation of entrance signs along U.S. 101 is necessary to increase the public's awareness that they have entered a national park. The signs would be designed to be harmonious with the natural setting (e.g. local materials would be used) and would be sited to avoid intrusion on scenic vistas. The National Environmental Policy Act (NEPA) requires consideration of the environmental effects of proposed federal actions. NEPA procedures ensure that environmental information is available to park decision makers and the general public before decisions are made and actions are taken. The act does not direct or preclude federal agencies from implementing specific actions.

128. Public comment received on the draft plan documents numerous instances where park visitors have had their experience negatively affected by PWC use on Lake Crescent (see response # 23). The plan does not propose to ban all motorized watercraft from the lake. The ban would be specific to PWC use and is based on the determination contained in the administrative record (see Appendix A), which includes an evaluation of impacts on such park values as quiet and solitude. Given the proposed ban on PWC use, the previous discussion regarding zoning has been omitted from the final plan.

129. Since publication of the draft plan, creation of a buoyed swimming area at Bovee's Meadow has been deleted from the NPS proposed action (Alternative A). The National Park Service believes that the existing buoyed no-wake zone, which begins approximately 30 yards offshore, together with the proposed ban on PWC use will adequately address water safety issues in the Bovee's Meadow area. There is always the potential for swimmers to be hit by boats whose operators are distracted by the multitude of activity and users in this confined area.

130. Although natural processes such as wave action and seasonal rise in water levels are factors in lakeshore erosion, visitor use has also contributed to the loss of shoreline vegetation and soil erosion. Whereas it is not the intent of the National Park Service to manipulate natural processes, it is NPS policy and the intent of this plan to minimize impacts from visitor use. Note that since publication of the draft plan, reserving the lakefront at Log Cabin for day use is no longer part of the NPS proposed action (Alternative A).

131. The document has been revised to more accurately reflect current conditions.

132. While visitation to the park or to various use areas within the park may fluctuate from month to month or year to year, the overall trend throughout the park, including Lake Crescent, is one of increasing use and visitation (see Appendix B).

133. The National Park Service anticipates that improved boat launch facilities and increased parking would help alleviate congestion and more evenly distribute boats on the lake. However, based on expectations of increased visitor use in the future (see response # 2), these expanded facilities are also expected to support increasing numbers of boaters. Consequently, boat fueling and the potential for fuel spills would likely increase.

The fuel spill referred to which involved the concessioner tour boat, the *Storm King*, was documented by the National Park Service and an internal investigation was conducted on the incident. The National Park Service was not required to report the spill to the U.S. Coast Guard.

COMMENTS AND RESPONSES

134. The National Park Service acknowledges that natural events such as those mentioned contribute to shoreline erosion. The text is not meant to imply that human use of the lakeshore is the sole factor responsible. Impacts attributed to visitor use are based on direct observations by NPS personnel, including park biologists and Lake Crescent rangers.

135. See response # 123.

136. None of the plants mentioned on pages 72-73 of the draft plan are federally listed as endangered or threatened. However, as indicated in response # 84, both western quillwort and Illinois pondweed are very rare within Olympic National Park; water lobelia is listed as a threatened species by the Washington Natural Heritage Program.

137. A clear statement of the long-range intent of Olympic National Park with regard to the use of Lake Crescent can be found under the heading "Management Vision for Lake Crescent" in the final plan. The NPS vision for Lake Crescent is as follows:

Lake Crescent will continue to offer a premier park experience to all visitors. It will remain a destination point for many people, a scenic backdrop for many more, and a threshold experience for those taking the time to walk into the adjoining wilderness.

The clarity of water, endemic fish populations, sensitive plant and animal species, old-growth forests, archeological sites, cultural landscapes, historic structures, and spectacular scenic resources will be maintained while accommodating a diversity of recreational experiences that are compatible with the preservation of these high quality resources and the serenity of the lake environment.

See also response # 123.

138. Olympic National Park's fishery biologists agree with the comment on page 81 that "it is likely that removal or reduction of shoreline facilities and activities would have a beneficial effect on fish, especially if the shoreline were restored to a more nearly natural condition." The statement, "with fewer facilities for recreational boaters, motorboat use on the lake would likely decrease" is also believed to be true.

139. The history of public involvement for the *Lake Crescent Management Plan/EIS* has been revised and now appears in the "Consultation and Coordination" section of the final plan. The referenced text has been deleted and no longer appears in the document.

140. As is clearly stated on page 85 of the draft plan, the agencies and individuals listed were consulted during the plan's development; it does not imply that each was involved in all aspects of the plan's preparation. A list of preparers, contributors, and consultants to the planning effort can be found in the "Appendixes/Bibliography/Preparers/Index" section of the final plan.

141. See response # 140. In addition, a description of the consultation that occurred with the U.S. Fish and Wildlife Service as well as coordination with the Lower Elwha Klallam and Quileute tribes and the Washington State Historic Preservation Office can be found in the "Consultation and Coordination" section of the final plan.

142. The list of principal document preparers has been revised to include the qualifications (e.g., expertise, experience, professional disciplines) of the persons who were primarily responsible for preparing the *Lake Crescent Management Plan/EIS*. A list of preparers, contributors, and consultants to the planning effort can be found in the "Appendixes/Bibliography/Glossary/Preparers/Index" section of the final plan.

Friends of the Earth

1. See response to comments under "Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington".

2. Under the NPS proposed action (Alternative A), a 40-mile per hour (mph) speed limit would be established lakewide for motorized watercraft (a 35-mph limit would be established under Alternative D). Both speeds are considered a safe and reasonable limit for all types of boating recreation. NPS watercraft would be excluded from this restriction in order to carry out law enforcement and rescue activities.

Noise regulations already exist for watercraft. On Lake Crescent, motorboats cannot exceed a noise level of 82 decibels at a distance of 82 feet (25 meters) from the vessel (36 CFR 3.7). This regulation is enforced through spot checks of watercraft by NPS rangers. Operators of watercraft that violate this regulation are asked to remove their boats from the lake.

3. Further analysis has been provided in the final plan which supports the proposed ban on PWC use; this analysis appears in Appendix A.

4. Due to the proposed ban on PWCs, the idea of zoning the lake for this type of use has been deleted from the NPS proposed action (Alternative A).

Hells Canyon Preservation Council

1. See response to comments under "Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington".

2. In addition, the following items have been included in the NPS proposed action (Alternative A) in the final plan:

- Motorized boats (excluding personal watercraft) would continue to operate on the lake. A 100-yard no-wake zone would be established from the shoreline, with a 300-yard no-wake zone adjacent to public use areas, the two historic districts, and habitat-sensitive areas.
- Boaters would continue to have access to the shoreline to beach their boats in addition to using existing docks.
- The maximum speed limit for motorized watercraft would be 40 mph, lakewide. This speed is considered a safe and reasonable limit for all types of boating recreation. National Park Service

COMMENTS AND RESPONSES

watercraft would be excluded from this restriction in order to carry out law enforcement and rescue activities.

Noise regulations are not proposed since they already exist for watercraft. On Lake Crescent, motorboats cannot exceed a noise level of 82 decibels at a distance of 82 feet (25 meters) from the vessel (36 CFR 3.7). This regulation is enforced through spot checks of watercraft by NPS rangers. Operators of watercraft that violate this regulation are asked to remove their boats from the lake.

3. Construction of a multi-use facility at Lake Crescent Lodge is not included in the NPS proposed action (Alternative A); it is only contained in Alternative C.

Inland Northwest Wildlife Council

See response to comments under "Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington".

International Jet Sports Boating Association

See response to comments under "Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington".

In addition, the following items have been included in the NPS proposed action (Alternative A) in the final plan:

- Motorized boats (excluding personal watercraft) would continue to operate on the lake. A 100-yard no-wake zone would be established from the shoreline, with a 300-yard no-wake zone adjacent to public use areas, the two historic districts, and habitat-sensitive areas.
- Boaters would continue to have access to the shoreline to beach their boats in addition to using existing docks.
- The maximum speed limit for motorized watercraft would be 40 mph, lakewide. This speed is considered a safe and reasonable limit for all types of boating recreation. National Park Service watercraft would be excluded from this restriction in order to carry out law enforcement and rescue activities.

Klahhane Club

See response to comments under "Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington".

Mount Rainier National Park Associates

See response to comments under “Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington”.

National Marine Manufacturers Association

See response to comments under “Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington”.

National Parks and Conservation Association

1. See response to comments under “Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington”.

2. Under the NPS proposed action (Alternative A), a 40-mile per hour (mph) speed limit would be established lakewide for motorized watercraft (a 35-mph limit would be established under Alternative D). Both speeds are considered a safe and reasonable limit for all types of boating recreation. NPS watercraft would be excluded from this restriction in order to carry out law enforcement and rescue activities.

Noise regulations already exist for watercraft. On Lake Crescent, motorboats cannot exceed a noise level of 82 decibels at a distance of 82 feet (25 meters) from the vessel (36 CFR 3.7). This regulation is enforced through spot checks of watercraft by NPS rangers. Operators of watercraft that violate this regulation are asked to remove their boats from the lake.

3. Construction of a multi-use facility at Lake Crescent Lodge is not included in the NPS proposed action (Alternative A); it is only contained in Alternative C.

4. (a) The goal of preserving and/or enhancing the quality of the visitor’s experience is articulated in the vision statement for Lake Crescent. This statement appears in the “Purpose of and Need for the Plan” section of the document under the subheading “Management Vision for Lake Crescent”.

(b) It is NPS policy and the intent of this plan to minimize resource impacts resulting from visitor use, including impacts to old-growth forest and riparian habitat. If visitor use is found to have an adverse impact on park resources, efforts to reduce or eliminate such impacts would be taken. The park superintendent has the authority to restrict visitor use to protect sensitive resources.

In the park’s *Resource Management Plan* (NPS 1991b) several project statements discuss monitoring programs for water resources, wildlife and vegetation. Specific projects deal with water quality and fish in Lake Crescent. Others are written more broadly to address monitoring concerns parkwide, including the Lake Crescent watershed.

(c) See response to # 4 (b).

COMMENTS AND RESPONSES

(d) A concession option to provide boat and bike rental service at both Fairholm and Log Cabin is included in the NPS proposed action (Alternative A). Presently, both non-motorized (rowboats, canoes) and motorized boats are available for rent at Fairholm; only non-motorized watercraft (water bikes) are currently available for rent at Log Cabin.

(e) NPS management policies (NPS 1988) provide general guidance for the design of park facilities. These policies state that parking areas would be limited to the smallest size appropriate and be designed to harmoniously accommodate motorized and non-motorized vehicles and pedestrians. In addition, stabilized overflow parking areas should be provided where needed to accommodate peak visitation. Permanent parking areas should not be sized for peak use. Although these agency-specific policies offer general guidance, NPS design professionals must ultimately rely on their education and experience when designing park facilities. In no instance would parking areas be designed for peak use.

(f) Before a concession contract is approved, further environmental analysis would be conducted on the impacts associated with the tour boat's operation. Included in this analysis would be the impacts associated with shoreline access.

(g) Under the NPS proposed action (Alternative A), a 100-yard no-wake zone would be established from the shoreline, with a 300-yard no-wake zone adjacent to public use areas, the two historic districts, and habitat-sensitive areas. The National Park Service believes these distances are sufficient to ensure visitor safety as well as resource protection.

Nisqually Delta Association

See response to comments under "Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington".

North Cascades Conservation Council

See response to comments under "Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington".

Northwest Ecosystem Alliance

1. See response to comments under "Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington".

2. Under the NPS proposed action (Alternative A), a 40-mile per hour (mph) speed limit would be established lakewide for motorized watercraft (a 35-mph limit would be established under Alternative D). Both speeds are considered a safe and reasonable limit for all types of boating recreation. NPS watercraft would be excluded from this restriction in order to carry out law enforcement and rescue activities.

Noise regulations already exist for watercraft. On Lake Crescent, motorboats cannot exceed a noise level of 82 decibels at a distance of 82 feet (25 meters) from the vessel (36 CFR 3.7). This regulation is enforced through spot checks of watercraft by NPS rangers. Operators of watercraft that violate this regulation are asked to remove their boats from the lake.

3. Construction of a multi-use facility at Lake Crescent Lodge is not included in the NPS proposed action (Alternative A); it is only contained in Alternative C.

Olympic Park Associates

1. See response to comments under "Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington".

2. The goal of preserving and/or enhancing the quality of the visitor's experience is articulated in the vision statement for Lake Crescent. This statement appears in the "Purpose of and Need for the Plan" section of the document under the subheading "Management Vision for Lake Crescent".

3. Language has been added to the final plan which states, "In accordance with current Department of the Interior policy, in the absence of incompatible threats, acquisition will only be done when a willing seller, willing buyer situation exists." This language appears in the "Purpose of and Need for the Plan" section of the document under the subheading "Establish Priorities for Land Acquisition in the Lake Crescent Area," as well as in the "Affected Environment" section under the heading "Land Use and Ownership".

4. Under the NPS proposed action (Alternative A), a 40-mile per hour (mph) speed limit would be established lakewide for motorized watercraft (a 35-mph limit would be established under Alternative D). Both speeds are considered a safe and reasonable limit for all types of boating recreation. NPS watercraft would be excluded from this restriction in order to carry out law enforcement and rescue activities.

Noise regulations are not proposed since they already exist for watercraft. On Lake Crescent, motorboats cannot exceed a noise level of 82 decibels at a distance of 82 feet (25 meters) from the vessel (36 CFR 3.7). This regulation is enforced through spot checks of watercraft by NPS rangers. Operators of watercraft that violate this regulation are asked to remove their boats from the lake.

5. Construction of a multi-use facility at Lake Crescent Lodge is not included in the NPS proposed action (Alternative A); it is only contained in Alternative C. The proposed action has been modified to state that within the scope of existing or future concession contracts, the National Park Service may investigate the feasibility of increasing the number of units (rooms) at Lake Crescent Lodge by a maximum of 10 percent (a total of six units). To help minimize impacts on the surrounding forest, construction would be limited to previously disturbed sites wherever possible.

6. It is NPS policy and the intent of this plan to minimize resource impacts resulting from visitor use, including impacts to rare aquatic plants in the Bovee's Meadow area. Since publication of the draft plan, creation of a buoyed swimming area at Bovee's Meadow has been deleted from the NPS proposed action (Alternative A).

COMMENTS AND RESPONSES

7. Since the plan does not provide detailed site designs for any given management area, but instead proposes a general direction for visitor development and resource protection throughout the watershed, a general analysis of environmental impacts is provided. Consequently, before implementing some actions, further environmental analysis may be necessary. In each case, compliance with all laws, regulations, and policies would be carried out before any action is undertaken.

Further analysis has been provided in the final plan which supports the proposed ban on PWC use; this analysis appears in Appendix A.

A list of mitigation measures and development constraints as well as implementation priorities has been added to the final plan and appears in the "Alternatives, Including the Proposed Action" section of the document under the heading "Actions Common to All NPS-Action Alternatives (Alternatives A, C, and D)".

Olympic Park Institute

See response to comments under "Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington".

In addition, the following items have been included in the NPS proposed action (Alternative A) in the final plan:

- Motorized boats (excluding personal watercraft) would continue to operate on the lake. A 100-yard no-wake zone would be established from the shoreline, with a 300-yard no-wake zone adjacent to public use areas, the two historic districts, and habitat-sensitive areas.
- Boaters would continue to have access to the shoreline to beach their boats in addition to using existing docks.
- The maximum speed limit for motorized watercraft would be 40 mph, lakewide. This speed is considered a safe and reasonable limit for all types of boating recreation. National Park Service watercraft would be excluded from this restriction in order to carry out law enforcement and rescue activities.

Noise regulations are not proposed since they already exist for watercraft. On Lake Crescent, motorboats cannot exceed a noise level of 82 decibels at a distance of 82 feet (25 meters) from the vessel (36 CFR 3.7). This regulation is enforced through spot checks of watercraft by NPS rangers. Operators of watercraft that violate this regulation are asked to remove their boats from the lake.

Rivers Council of Washington

1. See response to comments under "Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington".

2. Because the plan does not provide detailed site designs for any given management area, but instead proposes a general direction for visitor development and resource protection throughout the watershed, a general analysis of environmental impacts is provided. Consequently, before implementing some actions, further environmental analysis may be necessary. In each case, compliance with all laws, regulations, and policies would be carried out before any action is undertaken.

Sierra Club (Cascade Chapter)

1. Since the plan does not provide detailed site designs for any given management area, but instead proposes a general direction for visitor development and resource protection throughout the watershed, a general analysis of environmental impacts is provided. Consequently, before implementing some actions, further environmental analysis may be necessary. In each case, compliance with all laws, regulations, and policies would be carried out before any action is undertaken.

Further analysis has been provided in the final plan which supports the proposed ban on PWC use; this analysis appears in Appendix A.

A list of mitigation measures and development constraints as well as implementation priorities has been added to the final plan and appears in the "Alternatives, Including the Proposed Action" section of the document under the heading "Actions Common to All NPS-Action Alternatives (Alternatives A, C, and D)".

2. See response to comments under "Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington".

Under the NPS proposed action (Alternative A), a 40-mile per hour (mph) speed limit would be established lakewide for motorized watercraft (a 35-mph limit would be established under Alternative D). Both speeds are considered a safe and reasonable limit for all types of boating recreation. NPS watercraft would be excluded from this restriction in order to carry out law enforcement and rescue activities.

Southern Willamette Earth First!

1. See response to comments under "Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington".

2. Construction of a multi-use facility at Lake Crescent Lodge is not included in the NPS proposed action (Alternative A); it is only contained in Alternative C.

Tahoma Audubon Society

1. See response to comments under "Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington".

COMMENTS AND RESPONSES

2. Under the NPS proposed action (Alternative A), a 40-mile per hour (mph) speed limit would be established lakewide for motorized watercraft (a 35-mph limit would be established under Alternative D). Both speeds are considered a safe and reasonable limit for all types of boating recreation. NPS watercraft would be excluded from this restriction in order to carry out law enforcement and rescue activities.

Noise regulations already exist for watercraft. On Lake Crescent, motorboats cannot exceed a noise level of 82 decibels at a distance of 82 feet (25 meters) from the vessel (36 CFR 3.7). This regulation is enforced through spot checks of watercraft by NPS rangers. Operators of watercraft that violate this regulation are asked to remove their boats from the lake.

3. Under the NPS proposed action (Alternative A), several projects are proposed to help alleviate resource impacts along the Lake Crescent shoreline as well as various creeks. These actions include removing shoreline campsites at Fairholm campground; relocating the A-frame units at Log Cabin Resort; removing RV sites bordering Log Cabin Creek; and relocating picnic sites away from the creek at La Poel. Barring specific closures necessary to protect resource values or visitor safety, boaters would continue to have access to the shoreline to beach their boats, in addition to using existing docks.

4. Construction of the multi-use facility at Lake Crescent Lodge is not included in the proposed action; it is only contained in Alternative C. The NPS proposed action has been modified to state that within the scope of existing or future concession contracts, the National Park Service may investigate the feasibility of increasing the number of units (rooms) at Lake Crescent Lodge by a maximum of 10 percent (a total of six units). To help minimize impacts on the surrounding forest, construction would be limited to previously disturbed sites wherever possible.

The Izaak Walton League of America (Florida Keys Chapter)

See response to comments under "Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington".

The Mountaineers

1. Under the NPS proposed action (Alternative A), a 40-mile per hour (mph) speed limit would be established lakewide for motorized watercraft (a 35-mph limit would be established under Alternative D). Both speeds are considered a safe and reasonable limit for all types of boating recreation. In addition, a 100-yard no-wake zone would be established from the shoreline, with a 300-yard no-wake zone adjacent to public use areas, the two historic districts, and habitat-sensitive areas.

Noise regulations already exist for watercraft. On Lake Crescent, motorboats cannot exceed a noise level of 82 decibels at a distance of 82 feet (25 meters) from the vessel (36 CFR 3.7). This regulation is enforced through spot checks of watercraft by NPS rangers. Operators of watercraft that violate this regulation are asked to remove their boats from the lake.

2. See response to comments under "Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington".

The Seattle Garden Club

See response to comments under “Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington”.

The Wilderness Society

1. See response to comments under “Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington”.

The National Park Service plans to develop a consistent, servicewide policy on PWC use in the near future. The public will have an opportunity to comment on this new policy following its publication in the *Federal Register*.

2. Because the plan does not provide detailed site designs for any given management area, but instead proposes a general direction for visitor development and resource protection throughout the watershed, a general analysis of environmental impacts is provided. Consequently, before implementing some actions, further environmental analysis may be necessary. In each case, compliance with all laws, regulations, and policies would be carried out before any action is undertaken.

Washington Kayak Club

1. See response to comments under “Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington”.

2. Under the NPS proposed action (Alternative A), a 40-mile per hour (mph) speed limit would be established lakewide for motorized watercraft (a 35-mph limit would be established under Alternative D). Both speeds are considered a safe and reasonable limit for all types of boating recreation. NPS watercraft would be excluded from this restriction in order to carry out law enforcement and rescue activities.

Noise regulations already exist for watercraft. On Lake Crescent, motorboats cannot exceed a noise level of 82 decibels at a distance of 82 feet (25 meters) from the vessel (36 CFR 3.7). This regulation is enforced through spot checks of watercraft by NPS rangers. Operators of watercraft that violate this regulation are asked to remove their boats from the lake.

3. Construction of a multi-use facility at Lake Crescent Lodge is not included in the NPS proposed action (Alternative A); it is only contained in Alternative C.

Washington Wilderness Coalition

1. See response to comments under “Local, State, and Federal Agencies: Board of Commissioners, San Juan County, Washington”.

COMMENTS AND RESPONSES

2. Under the NPS proposed action (Alternative A), a 40-mile per hour (mph) speed limit would be established lakewide for motorized watercraft (a 35-mph limit would be established under Alternative D). Both speeds are considered a safe and reasonable limit for all types of boating recreation. NPS watercraft would be excluded from this restriction in order to carry out law enforcement and rescue activities.

Noise regulations already exist for watercraft. On Lake Crescent, motorboats cannot exceed a noise level of 82 decibels at a distance of 82 feet (25 meters) from the vessel (36 CFR 3.7). This regulation is enforced through spot checks of watercraft by NPS rangers. Operators of watercraft that violate this regulation are asked to remove their boats from the lake.

3. Construction of a multi-use facility at Lake Crescent Lodge is not included in the NPS proposed action (Alternative A); it is only contained in Alternative C.

SUMMARY OF WRITTEN COMMENTS RECEIVED ON THE LAKE CRESCENT MANAGEMENT PLAN/ENVIRONMENTAL IMPACT STATEMENT

The majority of written comments received on the draft plan focus on the use of personal watercraft on Lake Crescent. Because of the volume and similarity of comments received on this as well as other issues, substantive comments from individuals and businesses that have been previously unaddressed in the responses to comments raised at the two public meetings or in letters received from agencies and organizations have been summarized by topic according to 40 CFR 1503.4. These summaries, which incorporate text from the original comment letters, are presented below.

A sampling of letters from individuals and businesses, representing the range of opinions expressed, is also included at the end of this section. All of the original comment letters are on file at park headquarters at Olympic National Park.

PERSONAL WATERCRAFT (PWC)

A Ban on the Use of Personal Watercraft (PWC) is Discriminatory

- Since PWCs are defined as watercraft and must follow the same boating rules, PWC operators should have the same rights and opportunities to use their boats in a legal manner as any other boat operator. The plan fails to treat all boaters equally and discriminates against PWC users. If you ban PWCs, then you must ban all types of watercraft. To discriminate against anyone based on the size and style of their boat is wrong and possibly illegal, as was the case in San Juan County, Washington.

Personal Watercraft Should Not Be Singled Out; All Boaters Should Be Treated Equally

- It is the responsibility of the National Park Service to manage the entire spectrum of legitimate recreational user groups, within its regulated boundaries, equally. Some user groups should not be allowed to impose their will and prejudices upon any other legitimate recreational user group because of what is typically an emotional or irrational dislike for their vehicle. Establishing reasonable regulations for all user groups would be supported, so long as they are applied equally across the recreational spectrum. The key issue is to maintain or enhance the recreational experience of all users, while maintaining fair access for each user group.
- As is the case with any other sport or activity, the ultimate responsibility lies with the operator and not the vehicle. In fact, any motorized vehicle can be dangerous if not operated with courtesy to others, which is what we have laws and enforcement of those laws for, to protect the rights of others but not to limit the freedom of a large user group. The vast majority of PWC operators are very responsible and careful when operating their PWC. The National Park Service should not eliminate the privilege of operating PWCs on Lake Crescent because of a few irresponsible boaters.
- PWCs are classified by the U.S. Coast Guard as Class A (less than 16 feet) inboard vessels. The National Park Service should not segregate or ban the use of any official U.S. Coast Guard certified vessel, including PWC. All boats must be treated equally by allowing equal access to public waterways and uniform enforcement of all local, state, and federal boating rules. PWC owners should have the

same rights and opportunities to use their boats in a legal manner as any other boat owner. There is opposition to any plan that targets PWC and fails to treat all boaters equally and fairly. Establishing reasonable regulations for all user groups would be supported, so long as they are applied equally across the recreational spectrum. However, if you ban PWCs, then you must ban all types of watercraft.

- PWCs should not be singled out. There are hundreds of boating accidents every day. The fact that there are going to be PWC accidents is obvious. There are noisy boats and noisy PWCs. There are discourteous boat operators (that have been observed doing much more damage than any reckless PWC operator) and there are discourteous PWC operators. PWCs can be fun and safe, just as boats can be. As is the situation with any other sport or activity, the ultimate responsibility lies with the operator not the vehicle. The key is that Washington, with all of its boating areas, needs to educate boat owners. Currently, someone can march right into a boat store, purchase a boat, and take it out into the water, without knowing one ounce of boating safety. This should be illegal.
- Boating regulations should apply to everyone and be fair to all. All user groups should have access to the lake on an equal basis. The park's *Water Safety Plan* has made a difference and offers enough restrictions.
- The National Park Service should treat PWCs the same as other watercraft by selecting Alternative C (100-yard no-wake zone for all boats); this would be fair to all boaters. A 100-yard rule is common throughout most jurisdictions and will establish the necessary safety margin. As long as this distance is adopted and strictly and equally enforced, all users will enjoy our waterways.
- The National Park Service is prejudiced against PWCs. This fact is evident because PWCs will be regulated more stringently than all other motorboats.
- An entire user group should not be denigrated or chastised because of the irresponsible actions of a few individuals. Blanket punishment of an entire recreational user group is not an acceptable form of management in any public recreation area.
- Eliminating any user group from the area, just to simplify the task of managing that area, is not acceptable. Neither is restricting any user group, or groups, to the point of elimination a viable option, unless of course, the National Park Service is prepared to close the lake to all forms of recreational use.
- If the National Park Service decides to ban PWCs because people complain about the noise, then you may well ban all boats because they are just as noisy as PWCs. They can also be just as inconsiderate on the water as PWC owners. By all boats, I mean anything that requires a motor to operate.
- What gives the National Park Service the right to deny any user group rights to the lake?

Provide Alternatives to a Ban on Personal Watercraft

- There are alternative solutions to the problem of inconsiderate and unsafe boaters. It would be wiser to establish rules and restrictions that allow enjoyment of the lake without allowing disturbing and unsafe

Use of Personal Watercraft Is Inappropriate in a National Park and Conflicts with NPS Mission

- The use of PWC on Lake Crescent is in direct conflict with the NPS mandate to protect natural, cultural, and wilderness values within parks. Attention to matters that seriously jeopardize the preservation of parks for present and future generations is of paramount concern to taxpayers and concerned citizens. The National Park Service should not give way to sports enthusiasts.
- PWCs do not belong in parks and wilderness areas that have been set aside to preserve natural values. These machines produce extremely high levels of noise that carry for great distances. Our lives are insulted by the noises of motors, engines, and other implements of modern society on a daily basis. We need to be able to escape these sounds in the quiet solitude of our national parks and wilderness areas. PWC are a legitimate form of recreation, in the right places...our National Parks are not one of those places.
- According to the NPS Organic Act, providing for the enjoyment of national parks is to be promoted by the National Park Service, but it is also clear that the enjoyment is to be based upon the scenery, natural and historic objects, and the wildlife of the park. The enjoyment gained from PWCs has nothing to do with the purpose for which national parks were established.
- PWCs represent a highly negative intrusion on the park and compromise the very values that are upheld through national park management. Beyond this fact, moreover, lies the irony that the typical PWC user has little regard for the aesthetic qualities of the body of water on which he operates; there are countless waters outside park boundaries on which he may enjoy his activity to the full.
- There are appropriate places for all user groups, but Olympic National Park is inappropriate for the use of PWC. There are plenty of other water bodies, closer to population centers, where PWCs can be enjoyed that are less damaging to the environment and to outdoor enthusiasts. The use of PWC is inappropriate in a park managed to protect natural, cultural, and wilderness resource values. PWC use on Lake Crescent will inherently threaten this mandate. PWC users generally operate their crafts in conflict with more passive recreational uses expected by the majority of park visitors. Their presence runs counter to any effort to provide a setting of beauty, peacefulness, and solitude.
- A large portion of the appeal of PWC is in the high speed they can attain, their maneuverability and their almost unsinkable design. Too many PWC operators recreate by exploiting these capabilities to the utmost without regard for their surroundings or the annoyance and disruption they cause to people or wildlife near them. The potential for reckless use is high. Allowing this disruptive, machine-based recreation at Lake Crescent is not consistent with the NPS mandate to conserve and to provide enjoyment of the scenery, natural, and historic objects, and the wildlife within Olympic National Park.
- The National Park Service was created to preserve natural resources so that future generations will be able to enjoy and experience these areas. The vast majority of people who visit the national parks do so to enjoy their natural beauty which includes quiet, tranquility, wildlife, etc. It is ludicrous to permit the uncontrolled enjoyment of a few ruin the enjoyment for everyone else.
- Ideally, in a multiple-user environment in a national park, one use, when viewed as incompatible with other uses, is not allowed free run if it deteriorates the quality of the visitor experience for other users.

behavior. Establishing guidelines for PWC use is preferable to an all out ban. If PWC operators do not follow the rules of the lake, then they need to be cited.

- Regulations on noise, speed, safety, and environmental protection are necessary and should be enforced equally for all powerboats, which is what a PWC is. Violations of the rules or laws should be inspected against, and have consequences associated with such actions. You will find that a handful of people cause the majority of problems and bad press. There is nothing dangerous about PWCs, simply the way some choose to operate them. The National Park Service needs to target the people that act irresponsibly while using the watercraft, not the watercraft in general.
- There are a variety of means to reduce irresponsibility among drivers of other vehicles, such as tickets, fines, licenses, usage fees, and age requirements, but a complete ban is typically not considered. The enforcement of laws already on the books to govern lakes in Washington state is the first step that needs to be taken.
- People need to be responsible for their actions. Education and training requirements, age restrictions, safety gear—these are things that would make a difference in operator responsibility and accidents.
- The obvious solution is for all boaters, including PWC operators, to police themselves and operate their craft in a safe and courteous manner. If this cannot be achieved, then the only other solution is additional policing by the local authorities.
- In similar circumstances, problem PWC users have been effectively dealt with by educating and patrolling with a voluntary force. Users of the lake were met and expectations shared in regards to safe boating. PWC users seemed appreciative and for the most part, complied. The sheriff's department stepped up patrol and punished those who abused or broke the law. The National Park Service should look at similar alternatives rather than banning PWCs.
- If the problem is with people not seeming to know how to behave on a PWC, then the National Park Service should require PWC owners to take a mandatory boating safety course and a operator's exam, just like for driving a vehicle. If you don't pass the exam, you don't operate a PWC. This would be more appropriate than banning this type of watercraft altogether.
- Consider issuing permits for PWC use and limit availability to certain numbers on the lake at a time, just as you limit permit availability for off-trail camping and other invasive activities.
- As a boat owner I should be able to use any of my boats on public waters, so long as I do not endanger others or myself, or make a nuisance of myself to other boaters or those on shore. I would much rather see regulations that prohibit dangerous acts and that promote responsible use rather than restricting a single type of boat (in this case, PWCs) from portions of the lake. Let's not punish the majority (responsible operators) because of the actions of a few (irresponsible operators).
- If the National Park Service feels compelled to allow jet skis, at least limit how close to shore they can be at particular speeds and limit their access into protected wildlife areas of those lakes.

PWCs detract from several aspects of the Lake Crescent experience. They are excessively loud and monopolize their surroundings, by their very nature. The intensity of the noise, the erratic pitch of the sound, are unignorable. Passive uses (e.g., hiking, nature appreciation) are compromised by the motor noise from PWCs.

- There may be a small part of the day-use population that wishes to use PWCs in Olympic National Park. However, thousands of tourists from all over the U.S. come to enjoy the natural beauty and serenity of the park. Although most of these visitors will never hear about the draft management plan, it is the responsibility of park management to look out for their interests, by preserving the environment and ensuring that visitors will find the quiet enjoyment of nature which they expect. The park does not exist for the uncontrolled enjoyment of the few. These areas are for all of us. Plenty of opportunities exist to operate fast, noisy boats elsewhere in Washington. Unless there is courage to resist all of the inappropriate demands on the unique settings in the park, the public heritage will be badly degraded.
- Although a plan banning PWC from Lake Crescent would be politically unpopular with some in the local area, Lake Crescent is not owned by the lake residents, or the people who use PWC on the lake; instead, the lake is "owned" by each and every person in this country. It is for the benefit of the multitudes that banning PWC on Lake Crescent should be considered, not for the few who exploit the natural resource with their usage.

Use of Personal Watercraft Could Set a Negative Precedent for Other NPS Areas

- To allow the use of PWC within Olympic National Park is incompatible with the philosophy of the National Park Service and would set a powerful, negative precedent that could be applied to other NPS areas making it difficult for other parks to keep them out. It could also lead to further encroachment of other types of incompatible motorized vehicles, both land and water.
- Once the precedent is established that PWCs are allowed on Lake Crescent, it will be difficult to impossible to remove them should problems develop. Similarly, the precedent will be established that Olympic National Park accepts mechanized recreation devices. Demands to allow other forms of mechanized transportation will surely follow.

PWC Use Poses a Threat to Resource Values (e.g., Quiet, Solitude, Water Quality, Wildlife) and Creates Conflicts with Other User Groups

- The use of PWCs would drastically and negatively impact the natural beauty and charm of Lake Crescent or any of the other waterways in Olympic National Park. Aside from producing offensive noise and interfering with wildlife, PWCs conflict with more passive recreational uses and would greatly infringe upon the experience most park visitors have come to find; that is, a quiet, natural refuge from urban life and a return to nature.
- PWCs change the character of those areas in which they are allowed. Instead of quiet, relaxing areas, these lakes have become overrun with people zipping around on PWCs disturbing people in non-

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motorized craft, and risking collisions with boaters, as well as swimmers. On weekends it resembles rush hour, only people are driving in all directions at once. It's a dangerous and frenetic environment, not one where people can go to relax and experience the outdoors in its natural state.

- PWCs disturb the natural quiet on Lake Crescent and thus the recreational experience for many who travel into Olympic National Park for the peace and quiet it provides. Operating between 85 and 105 decibels, PWCs produce noise levels which are exacerbated by the inconsistent and unpredictable acceleration and deceleration that is characteristic of their use.
- Most people go to recreate in Olympic National Park as a contrast to their daily lives. The excessive noise generated by PWCs cannot be mitigated by confining them to a portion of the lake; they are just too loud. No doubt PWCs provide enjoyment to the users, but that enjoyment is surely outweighed by the annoyance they cause to the rest of the park's visitors.
- Jet skis should only be permitted if they don't make aggravating noise. Until jet skis are made relatively silent, let our parks be a place of tranquility.
- Lake Crescent is not a place for speed, noise, and commotion. It is a spot to contemplate nature, to breathe clean air, and enjoy the peaceful quiet of one of America's national treasures. When people go to Lake Crescent, they are making an effort to get away from the noise and traffic of urban areas. They don't want to encounter an amusement park with cheap thrills, loud noises, and wild antics.
- Jet ski use creates a deteriorating atmosphere—noise, water pollution, serious problems in the policing of water safety and courtesy—that is inconsistent with a national park.
- The failure of the National Park Service to include an outright ban on jet skis favors the recreational preferences of a few over the needs of fish and wildlife, not to mention the desire of the majority of park visitors for a peaceful and quiet setting.
- Use of jet skis on Lake Crescent is totally incompatible with the other historical uses of the lake: canoeing, quiet picnicking near the lake, wildlife viewing, and a host of other great activities that put the park visitor in touch with nature. Allowing jet skis on the lake will do nothing but shatter these experiences for other park visitors, destroying their experience of the quiet majesty of Olympic National Park. Please continue to provide the type of park experience that the national parks were set aside to provide and ban jet skis from Lake Crescent.
- There is opposition to the use of jet skis or power boats on Lake Crescent. Let them go to Lake Sutherland or the Straits, but keep them away from here; they don't need it. The National Park Service should favor only quiet, non-polluting human-powered craft on the lake, the kind of craft which come closer to harmonizing with nature instead of spoiling it for others.
- Anything that disturbs the natural ecology of this area will ultimately destroy the qualities we all appreciate—the beauty, the serenity, the crystal clear waters, and the forests.
- PWCs such as jet skis create noise, disturb the natural surroundings and can spread European milfoil, a bio-invasion that is already threatening water ecosystems in the Pacific Northwest. Because there is no

law that requires cleaning boats between lakes, PWCs would spread European milfoil into Lake Crescent. Milfoil makes lakes and other water systems unfit to swim in and constricts boat usage by choking the water. Milfoil will also lower the water quality and is extremely difficult to kill.

- PWC engines put out more pollution than cars, and do not have to meet strict pollution control requirements like cars do. If PWCs are allowed, their noise could interfere with behavioral patterns of wildlife, conflict with more passive activities and infringe on the quality of visits to the national park.
- The outcome of jet ski use will be reduced passive visitation, increased boisterous crowds, and increased pollution in the form of noise, fuel and oil spills and seepage, and litter and garbage. These circumstances could also lead to increased human/animal interactions which could result in injuries and property destruction.
- The introduction of small engines onto the lake is likely to increase the amount of pollution already present due to human activities. Fuel spills could degrade, perhaps irreparably, the quality of the lake's water as well as habitat for waterfowl and aquatic animals and insects.
- PWCs are a danger to other water users, fish and animals, and to the operators themselves. The noise they make is absolutely out of keeping with the natural quiet a person is entitled to enjoy in a national park.
- The ability of PWCs to zip around in shallow waters threatens the aquatic and shoreline environment. They interfere with the passage of human-powered craft such as canoes and sea kayaks, which due to their low environmental impact and slow speeds, should have precedence over PWCs.
- The sights and sounds of PWCs on Lake Crescent would be quite distressing and would ruin its natural beauty. Sound travels and so do chemicals (gasoline, etc.) and there is no way these nuisances could be contained to one area, nor could jet skis or additional boats be hidden from sight. Noise, traffic, pollution, and risk of personal injury associated with jet skis stand to compromise the aesthetic qualities of Lake Crescent.

Banning PWCs or Confining Them to Specific Areas of the Lake Will Result in Disproportionate Impacts

- The use of PWCs would drastically and negatively impact the natural beauty and charm of Lake Crescent or any of the other waterways in Olympic National Park. Aside from producing offensive noise and interfering with wildlife, PWCs conflict with more passive recreational uses and would greatly infringe upon the experience most park visitors have come to find; that is, a quiet, natural refuge from urban life and a return to nature.
- Confining PWC use to a particular area of the lake will have a disproportionate impact on that area. At this point, it is not clear how people living and/or recreating near the proposed PWC zones will react to a concentration of PWCs. Has the National Park Service polled the concessioners, residents, or recreational users of the proposed PWC zones?

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- It is not clear what will happen when and if PWC use within a particular zone becomes overcrowded. Will there be pressure to expand the zone or open up new areas on the lake to PWC use?
- PWCs are already irritating enough and restricting their use to the east end of the lake would increase this irritation for residents in this area.
- If you ban PWCs entirely from Lake Crescent, you will create a massive problem for Lake Sutherland.

PWC Use Poses a Safety Concern

- PWCs pose a potential danger to passive recreational water user groups. Because they have no brakes or clutches to reverse direction, are unsteerable without power, and are inherently unstable, they pose a serious threat of colliding with hand-powered watercraft. Excessive speed is also a safety concern.
- If PWCs cannot be banned from the Bovee's Meadow area entirely, the National Park Service should designate a landing area for these watercraft to help improve safety between boaters and other user groups.

NPS Response to Comments Regarding PWC Use on Lake Crescent

In response to public comment received on the draft plan, as well as additional issues raised and further impact analysis, the park superintendent has reevaluated the use of PWC on Lake Crescent and has determined it to be an inappropriate use of Olympic National Park. This determination is based on the potential threat posed to park resources and values and the adverse effect on the experience of other park visitors, particularly those seeking a resource-based experience dependent on a national park setting. An administrative record providing the basis for the proposed ban on PWC use is provided in Appendix A.

NEW IDEAS GENERATED DURING THE PUBLIC COMMENT PERIOD

Other Boating Issues

1. *Comment:* It is completely reasonable to restrict boating hours on any lake. This restriction should not be specific to PWCs because other motorized watercraft make quite a bit of noise as well. It would not be unreasonable to have a regulation that says there should be no PWCs before 8:00 a.m. on lakes where people live/sleep. This is what we consider common courtesy and should be specific to each lake.

Response: Based on observations by Lake Crescent rangers, the National Park Service does not believe that boat noise prior to 8:00 a.m. is a significant problem that warrants restrictions at this time. However, if in the future it does become a significant problem, the National Park Service would consider imposing timing restrictions on the use of motorized watercraft.

2. *Comment:* The National Park Service should either eliminate speed boats from Lake Crescent or keep them away from camp areas so the noise won't be heard. Campers have a need and a right for quiet serenity at lakes in our national parks.

Response: The National Park Service has no plans to ban all motorized watercraft from Lake Crescent, now or in the future. Under the NPS proposed action (Alternative A), a 100-yard no-wake zone would be established from the shoreline, with a 300-yard no-wake zone adjacent to public use areas, the two historic districts, and habitat-sensitive areas. Also see response # 1.

3. *Comment:* A boat landing area should be designated in the Bovee's Meadow area to minimize safety concerns.

Response: There are no plans to designate a boat landing site in the Bovee's Meadow area. The National Park Service believes that the existing buoyed no-wake zone, which begins approximately 30 yards offshore, together with the proposed ban on PWC use will adequately address water safety issues in the Bovee's Meadow area. Barring specific closures necessary to protect resource values or visitor safety, boaters would continue to have access to the shoreline to beach their boats, in addition to using existing docks.

4. *Comment:* A speed limit of 50 mph for motorized watercraft is excessive. The National Park Service should establish: a lower maximum speed limit for motorboats (suggested limits: ≤ 5 mph, 25 mph, 35 mph); a limit on engine size (e.g., 25 hp); and set a reasonable maximum decibel level for engine noise. Also establish regulations requiring motorboats to travel a certain distance (e.g., 2,000 feet) from shore.

Response: Since publication of the draft plan, the maximum speed limit for motorized watercraft under the NPS proposed action (Alternative A) has been revised to 40 mph, lakewide. This speed is considered a safe and reasonable limit for all types of boating recreation. National Park Service watercraft would be excluded from this restriction in order to carry out law enforcement and rescue activities.

Noise regulations already exist for watercraft. On Lake Crescent, motorboats cannot exceed a noise level of 82 decibels at a distance of 82 feet (25 meters) from the vessel (36 CFR 3.7). This regulation is enforced through spot checks of watercraft by NPS rangers. Operators of watercraft that violate this regulation are asked to remove their boats from the lake.

Under the NPS proposed action, there are no plans to limit engine size. However, a 100-yard no-wake zone would be established from the shoreline, with a 300-yard no-wake zone adjacent to public use areas, the two historic districts, and habitat-sensitive areas.

5. *Comment:* Why does the preferred alternative allow a 50-mph speed limit for boats when the legal limit for motor vehicles on U.S. 101 is only 45 mph?

Response: See response # 4.

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6. *Comment:* Noise pollution is a major problem on Lake Crescent. The use of jet skis, water skis, personal watercraft, and any other personal motorized equipment should be banned from the lake. If motorboats cannot be banned, the National Park Service should require noise suppressors (mufflers) on motorized boats.

Response: The National Park Service has no plans to ban all motorized watercraft from Lake Crescent, now or in the future. Nor are there plans to require noise suppressors on motorboats. Also see response # 4.

7. *Comment:* All of the following actions which would limit boat access to the shoreline have been suggested: limit motorboat access to certain designated places along the shoreline to protect sensitive, damaged, or recovering shoreline areas; impose restrictions on motorboat proximity to the shoreline, except in docking areas; and limit the docking of tour boats to existing docks. In addition, the plan should expand no-wake zones.

Response: The National Park Service has considered all of the above suggestions regarding water recreation on Lake Crescent. However, under the NPS proposed action (Alternative A), barring specific closures necessary to protect resource values or visitor safety, boaters would continue to have access to the shoreline to beach their boats, in addition to using existing docks. In addition, a 100-yard no-wake zone would be established from the shoreline, with a 300-yard no-wake zone adjacent to public use areas, the two historic districts, and habitat-sensitive areas.

8. *Comment:* All motorized boats should be banned from the lake. If this isn't possible, limit the use of Lake Crescent by boats of certain size and horsepower and engine type. One way to achieve this goal is to limit lake use to smaller boats (e.g., 12 feet and under) except for a tourist attraction like the former tour boat. In addition, engine type and size might be limited to electric motors of limited horsepower to eliminate water pollution produced by gasoline and/or diesel engines. Limitations of this kind have the advantage of not zeroing in on only one kind of vessel.

Response: See response # 4 and # 6.

9. *Comment:* The National Park Service should provide one other limit—never to allow on a special permit basis the operation of hydroplanes or hydrofoil boats on park lakes.

Response: The National Park Service has no plans to permit the use of hydroplanes or hydrofoil boats on park lakes (including Lake Crescent), now or in the future.

10. *Comment:* It is unclear whether the 300-yard no-wake zone adjacent to public use areas would stop such activities as water skiing take-offs and landings directly in front of Lake Crescent lodge; if so, that's appropriate. If not, further restrictions need to be written to stop such activity from these historically serene settings.

Response: The National Park Service recognizes that both the Rosemary Inn and Lake Crescent Lodge were never silent and devoid of recreational use. Water skiers would still be able to do a beach start under the NPS proposed action (Alternative A). Outbound, skiers would be permitted to travel 90 degrees from the shoreline to the no-wake zone; on return, boats would be able to drop skiers off along the shoreline while remaining outside the no-wake zone.

Other Issues: Management Objectives

1. *Comment:* The alternatives do not address all or are in conflict with some of the management objectives identified in the plan, specifically:

(a) *Objective 2.* “Provide opportunities for a variety of outdoor experiences and recreation uses that minimize conflicts between recreational users, and are compatible with the protection of park resources and values.” This objective is in direct conflict with proposals to continue allowing jet skis on the lake. The draft plan calls for allowing jet skis in certain areas, even though these watercraft enhance conflict and should be prohibited.

Response: In response to public comment received on the draft plan, as well as additional issues raised and further impact analysis, the park superintendent has reevaluated the use of PWC on Lake Crescent and has determined it to be an inappropriate use of Olympic National Park. This determination is based on the potential threat posed to park resources and values and the adverse effect on the experience of other park visitors, particularly those seeking a resource-based experience dependent on a national park setting. An administrative record providing the basis for the proposed ban on PWC use is provided in Appendix A.

(b) *Objective 4.* “Protect critical spawning and rearing areas in the watershed which are used by the lake’s unique fish populations, and maintain natural terrestrial and aquatic communities upon which they depend.” This objective is not addressed in the plan. Because of the location of streams near development sites and the absence of specific location and size of development proposed, we must assume damage will occur. Further, the plan makes no mention of the need (in accordance with NPS directives) to control the population of exotic fish, which are damaging native species.

Response: The National Park Service disagrees that damage can be assumed. As discussed at the beginning of the “Environmental Consequences” section, this document is intended to provide only a general analysis of the environmental impacts associated with proposed actions. When specific projects are scheduled for implementation, the park would perform detailed environmental analysis and devise mitigation strategies necessary to protect aquatic habitat and resources.

There are no known exotic species of fish in the lake, but nonnative trout and kokanee were planted in the past and may have hybridized with native stocks. A genetic assessment of the trout is occurring and will examine this question.

(c) *Objective 7.* “Maintain, preserve, and interpret the buildings and cultural landscape including, but not limited to, Lake Crescent Lodge Historic District, Spruce Railroad, Rosemary Historic District, and the Storm King Ranger Station (also known as the restored Morgenroth Cabin).” This objective is contravened in the plan by proposals to rebuild certain historic buildings and perhaps all new structures on the historic landscape. Even if such actions were to comply with the National Historic Preservation Act, they would still violate the management objective.

Response: This management objective is based on complying with the National Historic Preservation Act. It is within the normal scope of such a statement to allow for both reconstruction/rehabilitation and new infill in accordance with *The Secretary of the Interior’s Standards for Rehabilitation* (NPS 1995b).

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(d) *Objective 8.* "Provide a range of overnight accommodations and other visitor facilities that are in keeping with the historic setting and character of the area." The removal of the 40-unit RV camp area at Log Cabin and its replacement with cabins is contrary to this objective.

Response: The National Park Service does not plan to eliminate all RV camping from the Log Cabin area, only those sites bordering the creek where resource degradation is a problem (approximately 8-10 sites would be eliminated; the actual number would be determined during the site design process). Despite a reduction in RV sites, a range of overnight accommodations including RV camping would still be available locally in the Lake Crescent area.

(e) *Objective 9.* "Provide for the continued use of private property within the Lake Crescent watershed while minimizing the impacts and effects of private development on the visitor experience, lake ecology, scenic and visual quality, and the historic setting." This objective relates to an issue that has major impact on the park, and certainly should be addressed in any EIS.

Response: As stated in the "Purpose of and Need for the Plan" section of the document under the subheading "Establish Priorities for Land Acquisition in the Lake Crescent Area," management objective # 9 would be achieved through continued implementation of the park's land protection plan.

(f) *Objective 10.* "Continue to purchase private property in the Lake Crescent area under an opportunity purchase situation when a willing seller is present." This objective has not been addressed; at the very least some discussion of need and strategy should be included.

Response: Language has been added to the final plan which states, "In accordance with current Department of the Interior policy, in the absence of incompatible threats, acquisition will only be done when a willing seller, willing buyer situation exists." This language appears in the "Purpose of and Need for the Plan" section of the document under the subheading "Establish Priorities for Land Acquisition in the Lake Crescent Area," as well as in the "Affected Environment" section under the heading "Land Use and Ownership".

(g) *Objective 12.* "Continue to inventory and monitor wildlife, vegetation, and water quality in the Lake Crescent watershed." This objective has not been addressed; a monitoring plan should be developed and included as part of the document.

Response: In the park's *Resource Management Plan* (NPS 1991b) several project statements discuss monitoring programs for water resources, wildlife and vegetation. Specific projects deal with water quality and fish in Lake Crescent. Others are written more broadly to address monitoring concerns parkwide, including the Lake Crescent watershed. There is no overall "Lake Crescent Monitoring Plan" as such; the National Park Service believes monitoring of the lake's resources is adequately and appropriately addressed in the *Resource Management Plan*.

Other Issues: Natural/Cultural Resources

1. *Comment:* The EIS is written with only vague references to environmental impacts caused by proposed development projects. No specific information is provided regarding major construction proposals for Fairholm, Log Cabin or Barnes Point, or the tour boat concession.

Response: Since the plan does not provide detailed site designs for any given management area, but instead proposes a general direction for visitor development and resource protection throughout the watershed, a general analysis of environmental impacts is provided. Consequently, before implementing some actions, further environmental analysis may be necessary. In each case, compliance with all laws, regulations, and policies would be carried out before any action is undertaken.

2. *Comment:* Several statements were made in the draft plan regarding air quality, water quality, noise, soil erosion, cultural resources, and aesthetics without referencing the specific sources that were used to make these statements.

Response: The National Park Service has added references in the final plan to substantiate such statements; the complete reference appears in the document's bibliography.

3. *Comment:* At various places the EIS refers to archeology and to the lake level having increased some 60 feet. Obviously ancient Native American artifacts would be under water. There is evidence that the water level change occurred approximately 800 years ago.

Response: The evidence for this rise in elevation comes from Tabor's 1987 *Geology of Olympic National Park* (page 98) where it states that blockage occurred soon after the Cordilleran ice retreated. That would make the 60-foot change in lake level *thousands* of years ago instead of hundreds of years ago. This would predate any human activity in the lake area.

4. *Comment:* In several references to East Beach, no mention has been made of the ferry dock and hotel that was there into the 1920s. For several years it was at the end of the road from Port Angeles via a covered bridge over the Elwha River.

Response: These resources are covered by the general reference to recreational use and homesteading activity in the "Affected Environment" section of the plan under the heading "Cultural Resources".

Other Issues: Management Areas

1. *Comment:* Limit the expansion of commercial operations around the lake, including a proposed conference center at Lake Crescent Lodge. Also maintain the current size of the lodge.

Response: Construction of a multi-use facility at Lake Crescent Lodge is not included in the NPS proposed action (Alternative A); it is only contained in Alternative C. Note that the proposed action has been modified to state that within the scope of existing or future concession contracts, the National Park Service may investigate the feasibility of increasing the number of units (rooms) at Lake Crescent Lodge by a maximum of 10 percent (a total of six units).

RESPONSE TO COMMENTS

2. *Comment:* The limitation to only five new units at Lake Crescent Lodge will not meet financial projections for reasonable profitability for the concessioner (National Park Concessions, Inc.). Also, the National Park Service should consider incorporating the multi-use facility as part of the NPS proposed action (Alternative A). This facility is needed to better serve lodge guests as well as the operational needs of the concessioner.

Response: See response # 1.

3. *Comment:* Lake Crescent is neither over-crowded nor has failing septic problems. What study did you do to determine this? Where is the crowding referred to in the draft plan and how often does it occur? Where and how often are there conflicts between motorized and non-motorized watercraft and endangerment of swimmers?

Response: Information on use patterns and trends, and user conflicts on Lake Crescent is limited. Statements regarding use of the lake are based primarily on observations by NPS personnel, visitation and occupancy records for concession operations, and occupancy levels at Fairholm campground. The document has been revised to delete the reference to "heavily used"; however, the National Park Service believes that use at Lake Crescent is increasing based on the above information sources. There are no data to indicate that fewer boats use the lake today than did 25 to 35 years ago. The Park Service also anticipates increased use of the lake in the near future. Documentation used to support this statement has been added in the final plan (see Appendix.B).

The draft plan does not state that septic systems are failing, only that they are a *potential* source of water pollution.

Heavy use of the Lake Crescent area occurs on weekends and holidays during the summer months (approximately 20 days during a 90-120 day period). At such times parking lots and overnight accommodations fill to capacity and available spaces are extremely limited.

Over the years NPS rangers have received verbal complaints from Barnes Cove residents regarding PWC use of the area (Dan Mason, Lake Crescent District Ranger, pers. comm.). Conflicts arise when different user groups use the cove simultaneously. On days of heavy recreational use, it is not uncommon to see multiple users including swimmers, rafters, and boaters (PWC, sailboats, and motorboats) all vying for limited space in the cove. Buoys have helped push some of the congestion away from the shoreline, but conflicts among various user groups remain on busy days.

4. *Comment:* Under Alternative A, the North Shore management area should include Pyramid Peak trail improvements.

Response: Improvements to the Pyramid Peak trail (as well as other trails in the Lake Crescent area) would be identified in the site-specific trail plans to be developed for each management area. The trail plans would identify existing and proposed trails, provide connections between various locations, identify those sections of trail that would be accessible, minimize potential pedestrian/vehicular conflicts, and prevent the proliferation of social trails that damage natural vegetation and cause other resource degradation, such as stream channel erosion. In areas of high foot traffic, clearly marked paths would help prevent further resource damage.

5. *Comment:* Clearly mark the eastern entrance to the Spruce Railroad trail to protect the peace and tranquillity of those who live beyond the entrance.

Response: The National Park Service would ensure that both the east and west trailheads of the Spruce Railroad trail are clearly marked to minimize the potential for visitors to stray onto private property.

6. *Comment:* Horses and llamas should not be allowed on the Spruce Railroad trail because of the odor and mess they create.

Response: The Spruce Railroad trail would be a multi-purpose trail; both horses and llamas would be permitted to share the trail with other approved users.

7. *Comment:* If large numbers of bicyclists use the Spruce Railroad trail it will be dangerous for hikers; the trail should be widened to delineate paths for both user groups.

Response: The Spruce Railroad multi-purpose trail would be approximately 8-feet wide with a crushed aggregate surface. The National Park Service believes that the proposed trail width is wide enough to accommodate all types of approved uses.

8. *Comment:* Bicycle tent sites should be added to existing campgrounds, not elsewhere.

Response: The National Park Service would explore the possibility of creating designated tent sites for cyclists at the Fairholm campground. This action would be considered during detailed site design for the Fairholm area.

9. *Comment:* Is the National Park Service considering increased security/law enforcement measures (not only with regard to personal watercraft use, but also trespassing, property damage, and littering)? What will this cost and how will it be funded?

Response: Due to limited funding, there are no plans to significantly increase the number of park personnel in the Lake Crescent area. However, the park would continue to augment its staff through the use of the VIP (Volunteer In Parks) program. In addition, as suggested by the Friends of Lake Crescent, the National Park Service would investigate the use of a citizens' auxiliary to assist in patrolling the lake.

10. *Comment:* An underground fuel tank also needs to be eliminated at Log Cabin.

Response: This tank was removed several years ago.

Other Issues: Visitor Services/Facilities

1. *Comment:* The public would be better served through direct contact with park rangers. A park ranger's personal interaction with visitors greatly outweighs reading a sign or walking by an exhibit. Additional park rangers should be hired.

RESPONSE TO COMMENTS

Response: The National Park Service agrees with this statement; however, due to budgetary constraints, there is limited opportunity to hire additional park rangers at the present time. See response # 9 above.

Other Issues: Transportation/Circulation

1. *Comment:* The Lake Crescent section of U.S. 101 needs to remain open to bicycle riding.

Response: In the interest of safety, the National Park Service would like to see bicycle traffic removed from U.S. 101. As a short-term solution to help make the highway safer for bicycles, the Washington State Department of Transportation is looking at installing a warning light system that could be triggered by cyclists to alert motorists when they are on the road. Over the long term, establishing a multiple use trail along the Spruce Railroad grade would eliminate the need for cyclists to travel along the narrow, windy portion of U.S. 101 bordering Lake Crescent. However, those cyclists desiring to travel along U.S. 101 would still be permitted to do so.

2. *Comment:* Large signs/blinking lights should be placed along U.S. 101 to indicate that the road is a designated scenic highway.

Response: The National Park Service believes that installing entrance signs along U.S. 101 is necessary to increase the public's awareness that they have entered a national park. The signs would be designed to be harmonious with the natural setting (e.g. local materials would be used) and would be sited to avoid intrusion on scenic vistas. The use of blinking lights would be avoided since they detract from the natural setting.

Other Issues: Land Protection

1. *Comment:* Because architectural tastes vary widely, any architectural guidelines/regulations would be arbitrary and interfere with the rights of landowners to manage their property; they should be left out of the plan.

Response: There is no NPS standard that addresses consistency of architectural style within a national park setting. NPS management policies (NPS 1988) provide general guidelines in decisions regarding historic structures. In addition, the park's *Visual Themes Manual* (NPS 1989b) offers a set of general and specific guidelines for developing designs and maintenance procedures for park facilities. With respect to Lake Crescent, the *Visual Themes Manual* identifies a design theme that is consistent with the natural setting and historic character of the Lake Crescent area. This design theme applies only to park facilities, not to private structures. No attempt is being made to interfere with the rights of landowners to manage their property.

Other Issues: Public Involvement

1. *Comment:* The public comment period should be extended to a full 90 days to allow adequate time to read, study, and formulate an opinion on the draft plan. Also, the format of the public meetings should be

disclosed beforehand and meetings should be held at a neutral location. All affected parties should be notified about the availability of the plan, including mailing copies to each property owner. The National Park Service should issue a revised draft plan and hold additional public meetings.

Response: In response to widespread public interest, the initial (60 day) review period for the draft plan was extended twice for 45 days each, bringing the total length of review time to 150 days. In September 1996, a newsletter was sent to 481 government agencies, organizations and individuals on the park's mailing list. The newsletter advised the public that the draft plan would soon be ready for release and provided information about the upcoming review period. Recipients were requested to respond if they wanted to receive a copy of the plan.

As required by the regulations for implementing the procedural provisions of the National Environmental Policy Act (40 CFR 1501.7), the National Park Service has invited the participation of affected federal, state, and local agencies, Native American tribes, and other interested persons as part of the scoping process for this planning effort. The agency has also solicited comments from the public, including those persons or organizations who may be interested or affected. A detailed history of public involvement for the *Lake Crescent Management Plan/EIS* appears in the "Consultation and Coordination" section of the final plan.

The National Park Service does not intend to issue a revised draft plan or hold additional public meetings for this planning effort.

Other Issues: Plan Implementation

1. *Comment:* The plan does not set priorities for the various goals. Surely they are not all equal, particularly in the likely absence of funds to pursue them. Shouldn't this be considered? The National Park Service needs to establish priorities for recommendations.

Response: A section which outlines priorities for implementing proposed actions has been added to the final plan and appears in the "Alternatives, Including the Proposed Action" section of the document under the heading "Actions Common to All NPS-Action Alternatives".

**SAMPLE OF LETTERS FROM INDIVIDUALS
REPRESENTING THE RANGE OF OPINIONS EXPRESSED
ON THE DRAFT LAKE CRESCENT MANAGEMENT PLAN/EIS**

8

RECEIVED
MAILROOM

96 DEC -9 PM 1:45

OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

Input on the Lake Crescent proposal

Nov. 22, 1996

To Whom it May Concern:

I am very concerned with the environmental issues of Lake Crescent. I feel it is a lake that needs to be protected and preserved in a setting that meets the highest standards of what a National Park is supposed to be. Not a playground impacted with motorized boats and jet skies. Not a National Park that is pressured with more housing development and other human impacts. But a National Park that has a lake that remains free from harmful human impact in the form of various pollutions that are controllable i.e. noise pollution, motorized boats, and construction.

When I choose to go visit this area and have to pick between Lake Sutherland and Lake Crescent, the choice becomes very easy. I do not want to see Lake Crescent become a Lake Sutherland. As a tax payer and visitor to this area I support government regulation and welcome it when the purpose is to protect on of the few clean lakes we have from further human impact. Please take this into consideration when developing your plans for this lake.

Sincerely,

Tom Goetz

18

RECEIVED
MAILROOM

December 8, 1996

96 DEC 16 PM 1:48

OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

Superintendent David Morris
Olympic National Park
600 East Park Ave.
Port Angeles, WA 98362

Re: Draft Lake Crescent Management Plan

Dear Superintendent Morris:

My husband and I were recently fortunate to have stayed at Rosemary Lodge at an elderhostel, enjoying beautiful Lake Crescent and the rainforest next to it. I have heard that you have made some excellent recommendations for the Management Plan which protect the shoreline and by developing the Spruce Railroad Trail for bicyclists and improving visitor information. All of these certainly enhance the visitor experience.

But, what doesn't fit with your quest to improve the quality of the visitor experience is your allowance of noisy jet skis. While we were there late in the season we were not burdened with these abrasive and dangerous contraptions and had a wonderful experience.

I would recommend that you

- ban jet skis from everywhere on Lake Crescent (it's working at Glacier NP);
- place a maximum speed limit of 35mph for motor boats;
- set a maximum decibel level for boat engine noise;
- limit the expansion of commercial operations around the lake, including a proposed conference center at historic Lake Crescent Lodge.

I support the preferred alternative, but only with the above recommendations. I hope to return to your lovely park and would like another quality experience.

Sincerely,

Shirl Thomas

29

RECEIVED
MAILROOM

96 DEC 17 AM 11:42

OLYMPIC NATIONAL PARK
PORT ANGELES WA 98362

December 16, 1996

Superintendent David Morris
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

Dear Superintendent Morris:

I am writing to support the Park Services' Lake Crescent Management Plan, Alternative A but with the following modifications.

- First, prohibit jet skis from all parts of Lake Crescent.
- Second, establish a maximum speed limit for motor boats of 35 mph and set a maximum decibel level.
- Third, limit the expansion of commercial operations around the lake including a proposed conference center at Lake Crescent Lodge.
- Fourth, maintain the Spruce Railroad Trail as a hiking trail only.
- Fifth, limit motor boat access to the shores to certain designated places. Actually I would like to keep all motor boats off the lake entirely but I suppose this is not politically possible. Alas!

Sincerely,

Charles D. Louch
Charles D. Louch

Dear Superintendent Dave Morris:

23

I am concerned about your decision to allow personal watercraft (PWC) use, like jet skis, within the Olympic National Park. PWC are noisy, intrusive and dangerous. There are plenty of other water-bodies where PWCs can be enjoyed that are less damaging to the environment and to outdoor enthusiasts. Allowing PWC in Olympic may make it difficult for other National Parks to keep them out. Therefore, PWC have no place within a National Park.

I call upon you to reconsider your decision allowing PWC use within Olympic National Park.

Sincerely,

Nilder Ostersmith

59

National Park Service

RECEIVED MAIL ROOM

Dec. 2, 1996

Dear Sgt's Mom:

96 DEC 10 11:59

Lake Crescent is a lovely lake. Let's keep it that way.

I support the Park Service's preferred alternative (A) but only with the IMPORTANT ADDITIONS listed below:

Support the Park Service's preferred alternative (Alternative A)

BUT ONLY with these important additions:

- ✓ **Prohibit jet skis from all parts of Lake Crescent.**
The preferred alternative proposes options for zoning jet skis on different parts of the lake.
- ✓ **Establish a maximum speed limit of 35 mph for motor boats and set a maximum decibel level for engine noise.**
The preferred alternative proposes an excessive 50 mph speed limit, and fails to address the issue of excessive noise.

Zoning jet skis to set-aside areas of the lake is like removing the nighttime, buzzing mosquitos from inside your eardrum to 12" from your ear. Have you ever HEARD the incessant, whining, high-pitched, high-decibel drone (scream) of a jet ski?? (and noise is amplified and carried for miles over water)

Many lakes allow only electric motors. I endorse that rule also.

Sincerely,
Jean King

The Cheer:
Let's hear it for Common Sanity!

RECEIVED MAILROOM

96 DEC 16 PM 1:48

OLYMPIC NATIONAL PARK PORT ANGELES, WA 98362

97

1838 North Whitman

ATTENTION: Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362-6798

RE: **OPPOSITION TO ANY BAN OR RESTRICTION OF PERSONAL WATERCRAFT**

Dear Sir/Madam:

I am writing in **OPPOSITION** to any and all bans, restrictions, or "management plans" that discriminate against personal watercraft (PWC) on Lake Crescent. I am adamantly **OPPOSED** to any plan that targets PWC and fails to treat **ALL** boaters equally and fairly.

Personal Watercraft (PWC) should **NOT** be treated any different or singled out from any other boats or boating activities. As is the situation with any other sport or activity, the ultimate responsibility lies with the operator **NOT** the vehicle.

I am opposed to any bans or restrictions on any body of water that targets only PWC and fails to include other boats. Your consideration of my opposition to any form of discrimination of PWC is appreciated. Thank you.

Sincerely,

Sallaye O. Hoff
Sallaye O. Hoff

100

122

RECEIVED
MAILROOM
96 DEC 16 PM 1:48
OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

November 27, 1996

Superintendent, Olympic National Park
600 East Park Ave.
Port Angeles, WA 98362-6798

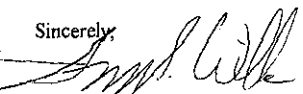
To Whom It May Concern:

Please accept this letter as my formal opposition to a ban or any other form of discrimination against personal watercraft use on Lake Crescent in the Olympic National Park.

I agree that our natural resources need to be protected, however, extreme and unnecessary measures such as this proposed ban on pwc only serve to discriminate against a portion of the taxpaying population and prevent people from enjoying these natural resources.

There are alternative solutions to the problem of inconsiderate and unsafe boaters. It would be wiser to establish rules and restrictions which allow enjoyment of the lake without allowing disturbing and unsafe behavior. To discriminate against anyone based on the size and style of their boat is wrong and possibly illegal, as was the case in San Juan County.

I will continue to oppose any ban or discriminations that threaten my right to enjoy Lake Crescent now and in the future.

Sincerely,

Greggory S. Wilde, D.D.S., P.S.

November 27, 1996

Superintendent, Olympic National Park
600 East Park Ave.
Port Angeles, WA 98362-6798
Attn.: Account Disputes

RECEIVED
MAILROOM
96 DEC -5 PM 12:16
OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

To whom it may concern;

I recently became aware of an initiative to ban, or severely restrict the use of personal watercraft on Lake Crescent. I have been riding Jet Skis and runabout style personal watercraft responsibly for over 10 years. During this time, I have paid sales tax on over 7 of the boats, and annual registration and licensing fees each year. In addition, I operate a rental business for personal watercraft.

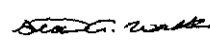
I consider myself and my friends very responsible operators, and it seems ashamed that some select group of people feels that their sense of values for what water should be used for is such that it allows them to arbitrarily discriminate against another group.

I believe that guidelines and / or rules for use should be specific, and enforced for all powerboats, which is what a personal watercraft is. Violations of the rules or laws, should be inspected against, and have consequence associated.....like other things in society. You will find that a handful of people cause the majority of the problems and bad press. There is nothing dangerous about personal watercraft, simply the way some choose to operate them. In 1994, a close friend of mine got hit by a boat in the Puget Sound.....the boat was following too close and he was unaware that an illegal aged operator was piloting the boat at less than 100 feet behind him....do you realize, the Pierce County Sheriff did not site the youth, the parent, or the boat owner, and, the youth fled the scene. I chased them 5 miles on a Jet Ski to get their names and registration. This does not make a boat unsafe, simply an operator. My point, is it is not the craft that is at fault, it is the operators.

Let's focus on arriving on rules, laws, and / or guidelines that all vessels respect. I live on the Puget Sound, and we call it co-habitation. The water has to be shared by cruisers, water skis, kayaks, sailboats, personal watercraft, and homeowners. Let's make room for everyone, and if a lake or waterway is too small for powerboats, then exclude them all; if there is a no wake zone, enforce it for all; if there is a shoreline zone, include water-skiers; if there are legal decibel limits, enforce it for jet boats, personal watercraft, weed eaters, and chain saws.....and, if there are rules for illegal operation, take care of the violators, it is what we are faced with in society everyday.....drunk driving is the number one cause of fatalities on the highway, and we have yet to outlaw cars or alcohol - we focus on the offenders.

Thanks for taking time to listen, if you have any questions or comments, you can reach me at:

Regards,


Scott A. Walker

146

November 3, 1996

OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

Mr. David K. Morris, Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

RE: Lake Crescent Watershed DEIS

Dear Mr. Morris:

This is in reference to the draft environmental impact statement for management of the Lake Crescent watershed with particular focus on the limitation of personal watercraft (PWC). I understand that the National Park Service has spent a great deal of time and public monies in this study, and cannot honestly say that I had not heard of the proposal to close Lake Crescent off to use except by a select group before the past month. I heard that the "Park" prefers to restrict use of the lake but as the proposal was not well accepted I did not realize it was being considered further. I was not aware that the Park had been pursuing those efforts for the past two years in putting together alternatives for uses of the lake. How was the draft document formulated? As the plan has been out for public review for such a short time and given that elections are foremost in everyone's minds at present, I join in the request that you continue the public hearings on the draft EIS for an additional period of time. The Park is an arm of the government which is by election of the people, and that is, as Mr. Clinton puts it, to enable the populace to live in safety and peace of mind, not to regulate our freedom to choose wisely. These types of restrictive actions go well beyond my idea of a needed action but appear more to be a decision of a certain thinking based on a group of people who would like to restrict lake use to a very select, highly vocal, well funded segment who would see to it that their way prevails without freedom of choice. Many of these people are urbanites who use the Peninsula as their playground but who don't want anyone else to say what happens here.

Having been involved in many EIS processes in my profession, I realize the approach is to offer alternatives from the most restrictive to the least restrictive and settle on something in between - this method appears the most fair and if given a choice, is the one most people agree with. The preferred alternative for the most part appears to be a middle of the road strategy and quite acceptable when given the other "alternatives". Given the other electives, Alternative "D" appears to be a fair approach to lake management with something to offer everyone. But you are being grossly arbitrary by even suggesting PWC use. Even restriction to a limited area is not tolerable as it is the distinction that PWC users are all obnoxious good for nothings! I take intense exception to this inference. You are proposing to take away a choice that means a great deal to me, my friends, and hundreds of good, solid, law abiding, considerate, hard working, dependable, people who just happen to tremendously enjoy the personal freedom found in riding a personal watercraft as opposed to a cumbersome boat. PWCs are licensed and in every way except their operation, considered to be a boat.

For the most part people who choose to invest in PWCs choose to do so for very sound reasons: ease of loading, size, personal freedom to participate not just sit. I consider PWCs to be the volkswagon bug, if you will, of the boat world, much less intrusive than a motorized boat (though not always

costing less). PWC are expensive and those of us who own them don't want to do anything foolish that would endanger them or ourselves. There are bad apples in every crowd. Fortunately, Lake Crescent is cold enough to only be used by the faint hearted and probably "rowdies" during only a very short period every year. The rest of us who are in it for much more than a few days of sun in vest in proper outfitting all seasons because we love the personal freedom and relaxation, the sheer freedom of choice that comes with riding a PWC. When you restrict PWCs to certain areas, you restrict the freedom of choice that is so much a part of America! You are telling me that my choice is not appropriate, that IF I choose a certain form of recreation other than a designated row boat, my choice is not acceptable, and therefore I must stay in "my corner". You are making a definite, selective statement that says that if I don't want to pursue enjoyment of the lake by row boat or fishing boat then I can just stay away or sit and watch. This is the 20th Century, a little noise is here to stay. And my freedom of choice is the one I hold most dear.

Being a government employee I get really tired of hearing how I am spending someone else's tax money and that I have no rights but "they" do. Well, now I feel the same. My family works hard, our relaxation is Lake Crescent in all its wonder. It is a complete injustice for those (of you) who would like to restrict us to a selected area to decide that because of a "mosquito like" noise we are obnoxious and undesirable. You will not find more considerate, friendly, helpful people than those, who like my family and friends, happen to prefer individual PWCs to boats. There are literally hundreds of places in the Olympic National Park where people can go to enjoy places that I can't take my PWC, and probably nine months out of a year you will not be bothered on the shores of Lake Crescent either, so why should the PWC user be branded and coraled because of choice? I have met many other users of the lake who don't own PWCs who, if given a choice, I would ban from being in public, but they will still be able to enjoy what I am thankful for at present and would protect if given the chance.

How are residents of the lake supposed to exercise their right of choice if they don't live at the east end? Would they have to trailer their PWCs to the east end to launch. Can they not use the lake if their choice is a PWC? The Park really goes too far in this attempt to restrict use. The other proposals for upgrade and increased public use are commendable. The proposed improvements in your preferred alternative to the Fairholm area and the improvement of camping facilities and recreational vehicle use is a big step forward and could much needed revenue to the coffers. I have met many Park employees who seem to feel that they are the Park, not just employees, and will see that uses within the Park meet their individual expectations.

Your job is not to bow to the pressures of elitist groups, but to make decisions that will protect the lake while supporting recreational pursuits and choices that capitalize on the lake's history. Our public lands and the habitat, both wildlife and natural, are to be protected, cherished, and enjoyed but not unreasonably restricted. I would rather have use of the lake than have people stomping around in wildlife areas if given a choice! The lake has always been and should continue to be enjoyed by everyone. Enforce the no wake zones. Enforce the speed for public safety reasons but don't enforce that which takes away the freedom of choice that says we are all individuals. This is not your job!

I have met many folks on the beach at the lake who came for relaxation who enjoyed watching my family enjoy our watercraft. Not ALL visitors are of the mind that the lake is for their single, individual, personal enjoyment. If we are all considerate we wouldn't have a problem, but people are people and (most) PWC users are some of the best I know.

Sincerely,

Sue Roberds

137

PLEASE MAIL BY NOVEMBER 19, 1996
LAKE CRESCENT MANAGEMENT PLAN
COMMENT QUESTIONNAIRE

RECEIVED
MAIL ROOM
NOV 21 AM 11:07
OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

TO: Superintendent David Morris
Olympic National Park
600 East Park Avenue
Port Angeles, Washington 98362

Dear Superintendent Morris,

Please review my answers to the questions below and consider this entire document as my initial comments to be included in the official record for the Lake Crescent Management Plan. I have signed my comments below. Please notify me personally if for any reason you feel you are unable to include this document and my comments in the official Lake Crescent Management Plan record.

Lake Crescent was included in the original boundaries of Olympic National Park when the Park was created in 1938 after much discussion. The following is quoted from section 5 of the 1938 Act creating Olympic National Park:

"Section 5: Nothing herein contained shall affect any valid existing claim, location, or entry made under the land laws of the United States, whether for homestead, mineral, right-of-way, or any other purpose whatsoever, or shall affect the right of any such claimant, locator, or entryman to the full use and enjoyment of his land, not the rights reserved by treaty to the Indians of any tribes."

Although you have extended the initial 60 day comment period an additional 45 days, it still falls when most seasonal visitors have returned to their homes. It still encompasses the national elections of 1996, the holidays of Thanksgiving and Christmas, and the celebration of the New Year. This impedes a comprehensive review of the Plan and a full and frank discussion of its provisions by those who will be most affected by it.

The public meetings are still scheduled for November 20, and November 21, 1996. Expected heavy holiday travel makes it difficult for lake users who reside outside the immediate area to attend. Their views and ideas may not be heard as a result. At present, the Olympic National Park has not decided on a meeting format.

The Seattle meeting is currently scheduled to be held in the evening at the Mountaineer's Club located

in a commercial area of the city. Local residents say its safety is questionable. The only public parking is unattended

Please circle your answer to the following questions. You may write additional comments by each question or at the end.

1. I believe the comment period should be extended the full ninety days until March 18, 1996. The present plan was over two years in the preparation and will guide Park policy for the next fifteen to twenty years. The current period comes at the worst possible time for many Lake users, effectively denying them a voice in their future.

AGREE DISAGREE NO OPINION

2. I desire the public meetings be conducted in February 1997 giving interested parties time to carefully review the plan and still spend the holiday season with family and friends.

AGREE DISAGREE NO OPINION

3. I desire the public meeting in Seattle be held in another, more neutral and safer location

AGREE DISAGREE NO OPINION

Written additional comments by you will make this document more valuable.

We were out of town so didn't get this mailed in time. Please consider my views circled above.

Signature Deana Elaine Hurn Date 11-19-96
Name Elaine Dean Hurn

181

RECEIVED
MAILROOM
THANK
YOU
97 JAN 17 AM 10:41
OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

Supt. Dave Morris
Olympic National Park
800 E. Park Avenue
Port Angeles, WA 98362

RE: Personal Water Craft on Lake Crescent

Dear Supt. Morris:

I am writing you to voice my opposition to the proposed plan to allow personal water craft, such as Jet-Skis, on Lake Crescent. This issue came to my attention through the National Parks Conservation Association magazine.

After many trips to the Pacific Northwest, I recently enjoyed a lovely, peaceful visit to Lake Crescent Lodge, the Olympic National Park and National Forest. I could hardly believe how quiet Lake Crescent was, and was happily surprised that I didn't notice any motorized boats on the lake. I'm happy that such places still exist, and I hold the place and the experience close to my heart.

Lake Crescent and the Olympic National Park are very special, beautiful places that ought to be preserved in their current tranquil states. I believe the use of PWCs would drastically and negatively impact the natural beauty and charm of Lake Crescent or any of the other waterways in the Olympic National Park. No one out on a rowboat, either fishing or just enjoying the water, wants to have a motorized Jet-Ski go whizzing by. Aside from producing offensive noise and interfering with wildlife in the Park, using PWCs would greatly infringe upon the experience most park visitors have come to find; that is, a quiet, natural refuge from urban life and a return to nature. I think it goes along with the on-going issue of keeping only limited access roads on the Olympic Peninsula and intentionally making it an effort to fully experience the area's natural beauty; its waterways, forests and coastline.

In wilderness areas nearer to my home, such as those in central Wisconsin, the use of PWCs has changed the character of those areas in which they are allowed. Instead of quiet, relaxing areas, these lakes have become overrun with people zipping around on PWCs disturbing people in non-motorized craft, and risking collisions with boaters, as well as swimmers. On weekends it resembles rush hour, only people are driving in all directions at once. It's a dangerous and frenetic environment, not one where people can go to relax and experience the outdoors in its natural state.

I believe that preserving the natural beauty, tranquility, and feeling of solitude found at Lake Crescent, the Olympic National Park, and other National Parks and Forests is an important issue. I think they are essential and unique wilderness areas in the United States, and whose experience should not be compromised by allowing the use of PWCs.

Supt. Morris, I appreciate you taking the time to read this letter, and having the opportunity to voice my opinion. I hope you will take it to heart. Thank you very much.

Kind regards,

Sue Klock

Sue Klock

November 16, 1996

Superintendent
Olympic National Park
600 East Park Ave.
Port Angeles, Wa. 98362-6798

RE: EIS for the management of Lake Crescent Watershed

Dear Sir,

As a PWC (personal watercraft user) and owner, I would like to voice my opinion on your new management plan for Lake Crescent which includes restrictions for PWC use.

First of all, I would like to say that I am very safety minded and have followed all rules and regulations regarding registration fees, insurance fees, taxes, launch fees, and have all the safety equipment required by the US Coast Guard on my boat. PWCs are classified by the US Coast Guard as Class A (less 16 feet) inboard vessels. PWCs are boats and as such should not be treated differently than others boats. We should be allowed equal access to all bodies of water and have the freedom to enjoy the public waterways. PWCs are not exempt from the US Coast Guard or Lake Patrols' rules, we must follow all the regulations which are required by all boat owners.

I have read your new management plan and would like to show my support for Option #3; which gives PWCs operators lakewide access with the exception of a 100 yard no-wake zone around the lake and continued launch access at Log Cabin, Barnes Point and Fairholm.

I support reasonable regulations that enhance the recreational experience at Lake Crescent, while maintaining equal access to ALL BOATS.

Thank you for your time.

Sincerely,

Michelle Benois

237
THANK
YOU

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96 NOV 19 AM 11:17
OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

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MAILROOM

THANK
YOU

96 NOV 25 PM 2:35

NOV 21 1996
OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

Superintendent,
Olympic National Park
600 East Park Avenue
Port Angeles, Washington 98362

Subject: Lake Crescent Draft Management Plan/EIS

Dear Sir:

Noise pollution is a major problem at Lake Crescent. In general, I support Alternative A of the Management Plan but I find the section on Water Recreation is inadequate to protect visitors from disturbing noise. I urge the Park Service to:

Ban all use of jet skis, water skis, PWC's (and any other personal motorized equipment which companies may invent in the future) on the entire lake.

Limit motorboats to 35 MPH and set forth regulations that they must travel 2000 feet from shore.

My husband and I spent four days at Lake Crescent Lodge in July 1995. Each day the piercing whine of jet skis, launched off the beach there, disturbed us from morning until sunset. Waterbirds disappeared. We could not enjoy our lodgings or the nearby trails. As a result, we will not recommend Lake Crescent to anyone.

I recognize that there may be a small part of the day-use population that wishes to use jet skis and PWC's in the Park. However, thousands of tourists from all over the United States come to enjoy the natural beauty and serenity of the Park. Although most of these visitors will never hear about the Draft Management Plan, it is the responsibility of Park management to look out for their interests, by preserving the environment and ensuring that visitors will find the quiet enjoyment of nature which they expect.

I am opposed to launching, pull-outs or boat access for motorboats or motorized equipment, except the Park tour boat, in the area near the Storm King Ranger Station, Olympic Park Institute, Lake Crescent Lodge, and Bovee's Meadow. The Ranger Station is a major entry point for visitors from out-of-state, and special efforts should be made to protect the wilderness quality of Barnes Point.

Similarly, guests at Lake Crescent Lodge have a right to expect peace and tranquillity. I do not understand why there is public beach access in front of the cabins at the Lodge, and I favor limiting day use to Bovee's Meadows only.

The national parks are supported by federal tax money. They are valued by the American public for their beauty and serenity. I urge the Park Service to end the noise pollution of jet skis, PWC's and speeding motorized boats on Lake Crescent. Please inform me of your final determination.

Sincerely yours,

Marjorie B. Rachlin

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MAILROOM

96 NOV 15 PM 2: 13

OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

DRAFT LAKE CRESCENT MANAGEMENT PLAN/EIS: SEPTEMBER 1996

David Morris
Superintendent
Olympic National Park
600 E. Park Ave.
Port Angeles, WA 98362

Dear Superintendent Morris:

I was pleased to receive a copy of the Draft of the Lake Crescent Management Plan of September 1996. While I have reviewed the entire booklet, my comments focus on Alternative A, as it is listed as the "preferred alternative".

I was impressed with the balance that this alternative offers; with expansion of services to visitors on the lake, as well as improvements in facilities that would both increase numbers of visitors who might utilize the area, while attempting to decrease the impact of these increased numbers by engineering campgrounds and paths to limit damage to sensitive areas around the lake.

Unfortunately, I find no data to support the effectiveness of any of these measures and none to support any curtailment of use of other areas. While some of the "reasons" for certain recommendations may seem obvious to some readers, virtually no hard evidence is presented to support any of the recommendations. This is most distressing as such information should have been researched and documented in such a proposal. If there is specific information that is not available estimations should be given and the basis of the estimates documented. I would use as an example the comments under "Issues" on page 8 referring to the "hazardous ingress and egress" at the present Fairholm store. Anyone who has driven by the store is likely to agree with this description. However, there should be some facts to support the extensive project outlined in Alternative A in response to the acceptance of this concern. For instance, how many accidents have occurred at that site compared to the junction of highway 101 and the road serving the campground, or the Soleduc Road entrance, or at Barnes Point? If there are facts to support this undertaking, please make them available. How else are we to address the cost-benefit trade-off for this expense.

Perhaps a more important area where facts will be needed in addressing public criticism of this plan is in the area of motorized water craft.

There is no reference in Alternative A, or in the Alternative D, which recommends even more stringent restrictions on motorized watercraft use, to what effect different types of motorized vehicles (watercraft, cars and trucks) have on the water and air quality of the lake. Certainly there is information available about the quantity and types of certain pollutants that would go into the water and air from an average 2 or 4 cycle engine exhausting in the air or under water. When discussing the effect on water quality of

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YOU

2

watercraft; the effect of traffic on 101 and other lakeside roads should be quantified so these can be compared. With 5658 average daily trips in January 1993 and 13,034 in August 1993 along highway 101, what is the average amount of air, water and soil contamination from exhaust and spillage in the Lake Crescent area, and how does this compare to that contributed by motorized watercraft on the lake (with the vast majority of the usage being only in the three summer months)?

Without this sort of information the public hearings can only be discussions of differences of opinions and straw votes. With information like this we can better judge the positive impact that restriction of such activities may have on the lake environment and compare that to the effect such restrictions may have on the "lifestyle" of lake users. Any plan designed to limit pollutants in the watershed area should include follow up to be certain that it is effective. Without a baseline estimate there will be no way to determine the effectiveness of any changes.

Another concern is that the definition of personal water craft is not delineated. Are we to assume that this group encompasses only those watercraft that will reasonably carry one or two persons? Or is my 21 foot Mastercraft with a 350 cubic inch V-8 engine a "personal water craft" when I am driving it alone, doing "donuts" in the middle of the lake. Personally I am not certain that any of the watercraft mentioned here really belong on Lake Crescent, but if we are to discuss these matters in a rational fashion, we need definitions. My own feeling is that any restrictions on power watercraft should be defined with a combination of horsepower and decibel level, (and perhaps size of the craft). If I were "King", I would aim for a 20 h.p. limit and have this become effective in 4-5 years, thus allowing for those who would have no use of larger boats and motors on other bodies of water, to sell them without rushing to do so.

While still on the subject of watercraft, I would like to rise to speak against any increase in areas for the parking for boat trailers, or increase in the number of, or improvements to, boat launching sites. To do this is analogous to building more bridges across Lake Washington to solve the problem of rush hour traffic jams. It may make it better for a little while, but only adds to the overall problem in the end.

Now I would like to briefly address the proposals in Alternative A, by area and then address the other three topical sections. Recognize please that these are opinions, not recommendations based upon special knowledge or access to facts other than observations of Lake Crescent for nearly fifty years.

FAIRHOLM:

I have only two comments or questions about this part of the plan as in Alternative A.

I wonder about access to the store facilities for if it is not directly accessible from the highway and how this would affect volume of business for the concessionaire.

I don't understand RV language well enough to know what having "no RV hookups" means. If that means that there is electricity but no sewage would be processed at the Fairholm campground (so the RV's would use their holding tanks) it seems

reasonable. If there is no electricity, then would they be allowed to use their (intrusive) generators?

The rest of the changes in Alternative A would appear to be likely to attain their objectives and provide for more visitor use in a manner that will decrease negative impact on the natural setting.

BARNES POINT:

Certainly Bovee's meadow and the beach becomes overrun at times. Adequate toilet facilities are definitely needed.

I personally would consider limiting beaching of boats to a small area or restricting it completely given the proximity to Crescent spawning grounds at the mouth of Barnes Creek.

It is quite clear that there is significant potential for serious trauma in that area without a roped off area for swimming.

LOG CABIN:

I am not much into architecture, and one might argue that at some time in the future those A-frames that Carl Hansen built might be considered unique examples of the 1960's style. I look upon Log Cabin area as a commercial type area and would think that whatever the park and the concessionaire work out for that area is up to those two parties.

LA POEL:

It seems that La Poel should not be used for anything other than light day use until an adequate septic system is established there.

EAST BEACH:

I agree that parking is a significant problem as are the inadequate toilet facilities. Judging from the litter I seen on the lake bottom when snorkeling in that area (a great place to collect aluminum cans), more garbage cans and signs reminding folks to use them are also in order.

NORTH SHORE:

I would strongly support use of the Spruce Railroad as part of a bike route around the lake. Toilet facilities are definitely needed and if campsites are developed, perhaps they could be clustered enough that at least one toilet is available in the mid portion of the trail. It would seem reasonable to have these campsites be "stove only." While campfires are usually allowed below 4000 feet elevation, on the narrow bench along the lake it would not take long for the collection of deadfall wood for fires to make an obvious impact on those areas near campsites.

I would defer to those inholders who have homes beyond the planned gate about this but could imagine such a gate making it necessary to meet guests at the gate at times when it was inconvenient.

Visitor Services/Facilities:

Highway 101 as a parkway: This would be nice, but until an alternate route for commercial traffic is established it will not have the same "ambiance" as the road to Hurricane Ridge and other similar routes.

Facility on 101 east of East Beach Road: This would also be a nice touch and may be more important if there is an alternate route for bicycles on the north side of the lake, but money might be better spent at Barnes Point area where the visitors are actually in the Park or at the west end of the lake where bicyclists and automobiles meet again.

If the Park can get money from someone else's budget I am in favor of it, (as long as it doesn't come from me directly).

Transportation/Circulation:

Simply widening East Beach Road will almost certainly lead to automobiles traveling at higher speeds, not safer bicycling. If another grade cannot be found other than that used for East Beach Road there should be a physical separation of the bicycle lane from that used by motor vehicles. For most vehicles East Beach Road is adequate if the 25 mph speed limit is observed. One of the reasons Highway 101 is not safe (even though it is much wider than East Beach Road), is that the traffic speed is 45 mph and higher. Significantly improving East Beach and Piedmont Roads would invite their use by locals and visitors as a commuting route thus increasing motor vehicle traffic.

The tour boat has been less intrusive than anticipated. Its use should still be limited to wider portions of the lake.

Water Recreation:

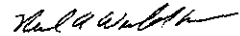
Exclude "PWC's", (no definition given) and establish wide no wake zones.

My personal opinion is that jetskis, unmuffled jet boats and other similar, whining or high decibel motorized watercraft have no place on any body of water. I think that they interfere with what I expect the "ambiance" of the Lake Crescent to be. However, I cannot define or quantitate "ambiance." If I cannot be "King" and have a planned reduction to 20 h.p. engines over 4-5 years, then I will be a N.I.M.B.Y. (or N.I.M.B.L.) person. I live in the East Beach area, so I would personally like to have any and all of the jetskis as close to Fairholm as possible.

Since I have no facts to support such restrictions being placed on others who use the lake, I don't expect anyone to place much weight on my "wants". I know that any use of gasoline or diesel engines on the lake is going to affect water and air quality in the area. But I don't know what effect specific changes may have. It may be that the automobile and truck traffic on Highway 101 is responsible for 99% of all pollutants (to air, water and soil) from internal combustion engines in the area. If that is true it is hardly reasonable to restrict use of motorized watercraft. If on the other hand, automobiles and trucks are only 10% of the problem and boats are 90%, then we have good reason to recommend major restrictions in the use of motorized watercraft on the lake and reasonable stewards of the lake would have to agree.

Thank you for considering this (if you have gotten this far you at least skimmed the letter), and I wish you luck in the public discussions to come.

Sincerely,

A handwritten signature in cursive script, appearing to read "Reed A. Wendel".

Reed A. Wendel

SUPERINTENDENT DAVID MORRIS
OLYMPIC NATIONAL PARK
600 EAST PARK AVE
PORT ANGELES, WA. 98362

RECEIVED
MAILROOM
97 JAN -2 AM 11:04 356
OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

DEAR MR. MORRIS,

WE WANT TO GO ON RECORD IN SAYING THAT WE FEEL ALL USER
GROUPS HAVE EQUAL RIGHTS TO LAKE CRESCENT. THAT NO ONE
USER GROUP SHOULD HAVE COMPLETE ACCESS TO THE LAKE.

WE DO NOT WANT OUR TAX PAYERS MONEY USED TO FIGHT ONE USER
GROUP WITH ANOTHER. THERE IS ROOM FOR EVERYONE.

PLEASE CHECK SECTION 5 OF THE 1938 ACT CREATING OLYMPIC
NATIONAL PARK. IT STATES THAT WE HAVE THE RIGHT TO THE
" FULL USE AND ENJOYMENT OF THE LAND".

THE RIGHTS TO THE LAKE BOTTOM WERE PURCHASED FROM THE DEPARTMENT
OF NATURAL RESOURCES AND TO THIS DAY LEASES ARE PAID TO THE DNR
OF THE STATE OF WASHINGTON..WHO REALLY OWNS THE LAKE.

LETS GET PAST THIS ISSUE ANY SPEND OUR HARD EARNED TAX MONEY
ON IMPROVING THE PARK INSTEAD OF IN THE COURTS.

SINCERELY,

Becky Aggergaard
BECKY AGGERGAARD

December 29, 1996

RECE
MAIL

National Park Service (Olympic) 357
600 E Olympic Avenue
Port Angeles WA 98362

Re: Comment on Draft Lake Crescent
Management Plan and EIS.

Greetings:

I was born and raised in Sekiu and Port Angeles. I've worked at Lake Crescent for two summers. I do not enjoy the buzzing of jet skis on the lake and I believe they should not be allowed on Lake Crescent at all. There are precious few places where elderly and disabled people can enjoy quiet and solitude. Lake Crescent does not seem like such a jewel to anyone when noisy flighty quick activity is happening around you. There are plenty of other places where people can use their PWC. Enforcement of a speed limit would cost too much. Imagine if someone is speeding - then you'd have a law enforcement person speeding after them to catch up! It would require training, equipment, prosecution, collection of fines, etc. To allow jet skis on Lake Crescent is against the goal of protecting

a visitor's experience.

The option of zoning areas for jet skis would not be acceptable either, again it would require law enforcement and noise carries all over the area around the lake. I have been hiking up Storm King Mountain - a gorgeous view point which is hard won and the experience was ruined by noisy PWC's at Fairholm - miles away! Also people who use the PWC's line all over the lake and would need to get from their launch/dock to the zones.

Simply put, Lake Crescent is one of those "special places", people come from all over the world to visit this area - they are usually only able to stay at the lake for @ 1/2 to 1 hour and if there are jet skis buzzing around I do not think they are going to enjoy their time at this magnificent place. Jet Skis are too invasive and should not be allowed at all on the lake. The minority should take their PWC's somewhere else so the majority don't have to experience them at all.

Sincerely,

Candace Kreider

RAYMOND G. KAMPS, Chief Special Agent

OLYMPIC NATIONAL PARK
600 East Park Ave. PORT ANGELES, WA 98362

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1-29-1997

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770

January 28, 1997

97 FEB -3 PM 2: 00

Dave Morris, Superintendent
Olympic National Park
600 East Park Ave. PORT ANGELES, WA 98362

Dear Mr. Morris,

I recently learned that the NPS in general, and your park in particular, are currently wrestling with the issue of whether to allow various kinds of motorized recreation (Jet-skis in particular) within the park.

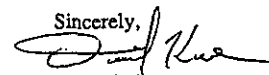
As I have an opinion, I thought I'd share my views with you. Without putting too fine a point on it, I'm very much opposed to the idea of "jet-skis" in any National Park!

Since we both know the "mission" of the NPS I won't bother lecturing on that point, but I must tell you that I find it quite disturbing that this issue is even being considered... To me it's absolutely unthinkable to allow noisy, pollution belching machinery into our National Parks. After all, cars already cause enough of a problem as it is, so why would we consider compounding the problem any further?

What's more, folks with "jet-skis" don't need a National Park to pursue their hobby. Lastly, I've always thought of National Parks as being, among other things, places that preserve the natural peace and quiet... If it ever comes to pass that National Parks don't preserve "quiet", where then would anyone go to find it?

Thanks for taking the time to read this letter, and I hope you'll do everything in your power to keep motorized activity in your park to an absolute minimum.

Sincerely,



David D. Kane

Dave Morris Supt
olympic nat park.
port angeles wash.
Pleas Mr Morris,
I am age 70 and retired, I have visited almost
all of our national parks from acadia to Katmai.

Regarding jet skis or P.W.C.'S

we camped "tent" fished - hiked - canoed in many of
them, and the memories are ledgon,
I have had the privilege of seeing several Grizzlies
in the wild, not at the Pump.

Now the noise from jet skis, snowmobiles -
off the road vehicles, plus the other disturbances they
cause is NOT compatible to our national parks
anywhere. There are millions of Government acres
other than Parks and Wilderness where multiple uses
are permitted, please do not permit this noise, gasoline
spills - plus oil film on waters in Olympic park.

Thank you
Ray Kamps 

January 27, 1997

Dave Morris, Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles WA 98362

Dear Mr. Morris:

I am writing this letter to urge you to protect your park's "quiet zone". Although not familiar with your park, I can tell you from personal experience that there are plenty of areas for watercraft users to enjoy their hobbies. Public beaches and lakes, as well as privately owned areas are numerous in any regional area. There is no reason for a few people to spoil what the rest of us come to the parks to enjoy: quiet!

Lake Lanier, a corp of engineers lake here in Georgia, only a few years ago, used to be a pleasant area for families to picnic, and play in the water. About three years ago, there was a huge increase in the watercraft use of all sorts (motorboats, skiboats, waterjets, etc.), which has not only resulted in many injuries and deaths, but also resulted in the park system being used less and less by people wanting to escape their suburb. Having to yell to your children only a few feet away in the water, because of water jets careening only a couple of yards away from the swimming area, is not exactly the peaceful weekend getaway that people imagine.

Please protect your park, and the taxpayers right, to have a parkland that is both beautiful and peaceful. Public beaches and lakes abound for watercraft users to enjoy. There are far fewer national parks, which we visit to experience with our children the wilderness that we used to take for granted.

Thank you for your time.

Sincerely,

Melanie Deeter
Melanie Deeter

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OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

Mar. 10, 1997

Supt. David Morris
OHP - 600 E. Park Ave.
Pt. Angeles, WA 98362

RE: Lake
Crescent DEIS

Dear Supt. Morris:

838

No jet skis, please!! I'm upset to think the Park Service is even considering these obnoxious nuisances on our beloved Lake Crescent. Will motorbikes on Park trails be next?!

I also think there is enough development of the lake shore already. Please shunt tourists to facilities in nearby towns rather than expand facilities in the Park. And please place any new campsites away from the lakeshore, in or near existing developments.

The lake is a highlight of the Park - please keep it that way and don't ruin it with jet skis or overdevelopment. Thanks for listening!

Mark Lawler
Mark Lawler

1204

Comment Form Draft Lake Crescent Management Plan/EIS

You may use this form to provide written comments on the Draft Lake Crescent Management Plan/EIS.

Turn your comments in at the public meeting or mail them to:

Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

Please submit all written comments by Wednesday, March 19, 1997.

Name (please print clearly): NORMAN C. KUNKEL

Mailing Address: _____

Affiliation (if any): _____

Do you feel the NPS has overlooked an important issue in preparing this plan? Yes -

Why? I don't think there should be any question about allowing PWC's in a national park.

The people need a quiet place where they can contemplate and renew their spirits without the noise of PWC's and the stench of exhaust.

There are few places for the masses of the cities to go for peace, quiet and serenity.

Do you think the NPS should examine alternatives not included in this draft plan? No.

Why? Just Ban all Motorized Craft except emergency boats for rescue.

Additional Comments: Ban all Motorized Craft on Lake Crescent except emergency motor craft operated by the Park Service to rescue park visitors who do not follow park safety rules or use poor judgement in their canoes or rowboats.

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OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

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97 JAN 29 AM 10: 08
OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

January 28, 1997

Dave Morris, Superintendent
Olympic National Park
600 East Park Ave.
Port Angeles, WA. 98362

Re: Jet-skis or PWC's

Dear Superintendent Morris:

I would like to offer my thoughts on the issue of allowing jet-skis or PWC's on Lake Crescent.

When I visit the Olympic National Park, which is often, I go there to relax, get away from urban stresses and experience nature in a wildland setting. The experience is mostly primitive and because of this, only those seeking this type of experience are likely to be there. I love this park and its proximity to my home. I love having the opportunity to be in this primitive, wildland setting and hear the sound of rushing water, the wind in the trees, the call of a raptor, the sight of deer or elk grazing or bounding through the trees.

If jet-skis or PWC's are allowed on Lake Crescent, the primitive experience will have been removed from an area that is steadily being encroached on by other land uses, as well. Even though motor-boats presently utilize this lake, they are not as intrusive as the sound of jet-skis would be. If jet-skis are allowed on the lake, I will no longer go there, because the experience will have changed from relaxing to an semi-urban to urban experience.

Wildlife are also likely to be impacted by the noise of these jet-skis. I understand that wolves may be reintroduced into the Park, I think this is great, this may be a solution to controlling deer and mountain goat populations. But, do you think that the wolves will go near the Lake Crescent area if there are jet-skis or PWC's creating an un-natural cacophony?

For the fisherman who is gently bobbing in a slight breeze, contemplating life as his fishing pole lazily leans against the side of his rowboat, to suddenly be

Dave Morris, Superintendent
Olympic National Park

January 28, 1997

Page 2

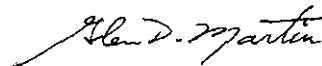
surrounded by fast moving, noisy craft and to be thrown about in there wake is repugnant and insulting to those of us who want to stretch our legs in the warm sun and listen to nature, not to power watercraft. Those who use jet-skis do not use them to go from point A to point B, they are out there to move fast and make wild maneuvers. There are other lakes that could easily take this activity on or that already allow this activity.

There are many other places that these personal watercraft users could go to enjoy this activity without using national park resources. This environment I have described as being primitive is quiet, relaxing, restive, and rejuvenating. To remove this is to disregard societies need for this type of experience, particularly in this fast-paced, noise filled world. Lake Crescent needs to be as it is to remind people that there is more to life than making more money or suing your neighbor. Lake Crescent is a resource of inestimable value, it is easy to access, and so serene as to invite people driving by on the highway to stop and take a deep breath.

Please do not allow this destructive change to occur to the use of this wonderful natural resource, it will be a stab in the heart of the Olympic National Park to do so. Please resist pressures to change this lakes land use status.

In closing, thank you for giving me this opportunity to share my rambling thoughts, I hope that you can see this resource through my eyes and see it as a resource that is unique in the North Olympic Peninsula and not to be taken lightly.

Respectfully,



Glen D. Martin

RECEIVED
MAIL ROOM

97 JAN 23 AM 10:55

OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

1286

Superintendent, Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362
January 20, 1997

Dear Mr. Morris,

I want to clarify a couple of matters that concern me. First of all, I want to know the exact definition of personal watercraft. Is personal watercraft any craft that a single person uses to transport themselves across the water? Or is personal watercraft a motorized watercraft used for the same purpose? If the latter is true, I would like to know if personal means a craft that holds only one person. I noticed in the "personal watercraft" photos that have been used, that only one person rides and that person stands up on it. If this is true, I will be the first person to say that pre 1990 vessels of this type do produce more noise than most people find desirable, especially when the exhaust has been modified. I do not believe that personal watercraft definition would suit the class A boat that holds two, or in some cases three people and is motorized. If this is true, then small open boats suitable for two or three persons should be classified as the same.

I have chosen to bring this to your attention as the Lake Crescent Management plan unfairly picks on "Jet Skis" without definition. I have heard time and time again, people talking about "Jet Skis" and PWC without a clear definition. Jet Ski is a trademarked name for a Kawasaki product. Personal water craft has been used loosely to describe several watercraft. When someone talks about noisy "Jet Skis" what are they referring to? Pre 1990 stand up watercraft that probably doesn't meet current noise standards? Or are they referring to the watercraft that people sit on that does meet current noise standards. In fact they will meet noise standards every time (as long as they have not been modified). This fact can be backed up by the Clallam County Sheriffs Department marine patrol. They have told me of several cases where larger pleasure boats and ski boats have not passed. This is acceptable?

The whole watercraft issue has been blown out proportion, and certain watercraft have unfairly been singled out. As the judge in the case of San Jaun County stated, "Personal watercraft are boats just as all other motorized watercraft and will be treated as such."

Banning one type of watercraft will accomplish nothing. For every thing you ban, there will be something to take its place. Has anyone seen the newest small jet boats that use twin engines to propel them? They are affordable, and fun, and if people cannot use the small watercraft they are using now they will sooner or later step up to the model that is just a little bigger. No, banning and isolating is not the answer, education and enforcement is the answer.

I understand that there is concern about overuse of the water. There are only a certain amount of parking places at the existing boat launches. There have been no new parking place added recently. If this is true, then there are no more boats on the lake than parking places for the cars and trailers to get them there. If the park doesn't add any more parking there will be little increase of boats on the water.

I respect peace and quiet. I also respect the fact that this is a free country and that not everyone enjoys peace and quiet in the same fashion. Some people enjoy paddling around the shore sneaking up on wildlife and listening to the water on their paddle. Others like to take their families to a small cove and sit in their boats and dive off into the clear cold water, or even motor around on a smaller craft alone and just stop in the middle of the lake to be alone out in the middle of nowhere. Of course this is not possible very often as the lake has a mind of its own. The wind races through the valley causing huge waves and unnavigable waters. Sometimes even the most sea worthy of sailors will shy away. I have made a rescue in such water before and I must say that if I didn't have a power-driven watercraft I would have been unsuccessful. I won't mention what kind of craft it was.

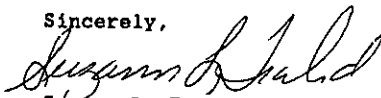
When snowboarding was in its infancy, the a lot of ski resorts banned them. As time went on, people realized that education and enforcing of rules made them acceptable. Now even the most exclusive resorts are accepting their presence as more and more responsible people are showing that something new and different is not necessarily bad, just different.

I hope I haven't gotten off the subject too much. I guess the final point that I want to make is that the beauty and health of Lake Crescent is in the hearts of us all. Especially of those who live here. We cannot bear the idea of looking but not touching something that we have embraced

with enthusiasm for generations. People who want Lake
Crescent to be like all of the other lakes in the National
Park do not understand the situation here. If they want a
lake untouched by activity, then there are lakes in the
wilderness area for that. PLEASE DO NOT CHANGE THIS LAKE.
IT HAS ALWAYS BEEN A RECREATIONAL LAKE AND SHOULD REMAIN SO.

I am sending a copy of this letter to Norm Dicks and Slade
Gordon, and I would very much like to hear from you very
soon on this matter. Thank you for your time.

Sincerely,



Suzann L. Traband

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97 FEB 25 1997

Comment Form

Draft Lake Crescent Management Plan/EIS

1363

JUL 23, 1997

You may use this form to provide written comments on the Draft Lake Crescent Management Plan/EIS.

Turn your comments in at the public meeting or mail them to:

Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

Please submit all written comments by Wednesday, March 19, 1997.

Name (please print clearly): DON AND CATHY CRAKER

Mailing Address: _____

Affiliation (if any): INHOLDER - member FRIENDS OF LAKE CRESCENT

Do you feel the NPS has overlooked an important issue in preparing this plan? Money -

Why? We are for the government allocating money for improvements at Lake Crescent for the existing areas (Barnes Pt., Log Cabin, La Poel, East Beach, North Shore, and Fairholm). Since there is not enough money to maintain the park as it is, no money should be spent on a new trail. Money should be spent for increasing salaries, hiring more help for maintenance and enforcing current laws. Money should be used for widening and improving the road from East Beach to Log Cabin and improving the Lyre River road to Spruce Trail, Trailhead, and improving parking at Spruce Trail Log Cabin and all other areas. Entry fees into park collected here should be used here and not to pay the deficit.

It appears to us that the ONP is moving toward a "look but don't touch" policy. Slowly but surely.

Page 2 of the plan states: "these specific actions were developed to be in harmony with enabling legislation for Olympic National Park which states "... preserve for the use and enjoyment of the people;" etc.; and it goes on to say "to conserve and render available to the people for recreational use." etc

Do you think the NPS should examine alternatives not included in this draft plan?

There is no reason why we can not continue to conserve and preserve and have the present recreation we now enjoy at Lake Crescent. We do not feel any need for restrictions. We do not need to get rid of RV camp at either Log Cabin or Fairholm. We do not need to close up East or Bovee's meadow. With as many hundreds of thousands of acres as there are in the ONP and as many other lakes, the people should be allowed on certain parts of the shoreline to sun bath, swim, fish, ski, camp, picnic, etc. Lake Crescent sits in close proximity to Port Angeles, Sequim, Joyce, etc. The local people as well as tourists have depended on this area for decades for a place to recreate. It doesn't lie in a remote area hundreds of miles away from civilization. People who come here should be edum to the fact that this is a multipurpose lake and if they need or want to

Additional Comments: peace and quiet, there are other areas of the park they can visit. Lake Crescent is not heavily used as you would like some (many) people to believe. July and August are our only busy months at Lake Crescent (on the water) and still I would consider the lake heavily used.

Restrictions will lead to more restrictions. Please improve and "render available to the people for recreational use"

Thank you for your time
Don and Cathy Craker

I ask that this letter be made a part of the official record.
CC. President Bill Clinton, Vice President Al Gore,
Congressman Norm Decker
Senator Patty Murray
Senator Slade Gordon

Cathy J. Craker
Don Craker

CC The President of the United States, Bill Clinton
Vice President Al Gore
Congressman Norm Dicks
Senator Patty Murray
Senator Slade Gordon

I am writing to you from Port Angeles, Washington. My husband and I as well as my husband's two brothers and families are inholders on Lake Crescent located in the Olympic National Park. We are also members of the "Friends of Lake Crescent."

The Olympic National Park has been working on a "Draft Lake Crescent Management Plan." They claim on page two of the plan that "camping and lodging facilities are reaching maximum occupancy rates and the lake itself is heavily used for many forms of water recreation. A long-range management plan is needed to effectively address the potential impacts resulting from increased volumes and intensity of use at Lake Crescent, and to guide future management decisions concerning the protection and public use of the area."

Lake Crescent is not heavily used. There are only two months out of the entire year that the lake is what could be considered "busy," (July and August.) My husband and I have both commented that there doesn't seem to be as many people on the lake the last two years. The Log Cabin RV Park has not been full except for holidays and times in August the last two years. The day after Labor Day and until July, Lake Crescent is very quiet. The Olympic National Park wants to remove all RV camping from the lake. That

2

is not a solution to maximum occupancy rates. When the park says "guide future management decisions," they mean control. They want us here to believe that we are a part of the process, but usually whatever they are planning is a done deal, long before we are asked for our input.

We feel the government is looking to lock up the Olympic Peninsula. Our lake needs to remain open to the people who love to camp, boat, ski, fish, picnic, etc. This is only one lake within the park and should not become a "look but do not touch" lake. Let the people have parts of the shoreline to recreate. There are hundreds of thousands of acres in the Olympic National Park where they preserve and conserve the "fragile vegetation." The campgrounds take up very little space in the overall picture.

The park is planning a possible new trail around the lake. The park does not have the money to properly maintain the park let alone build a new trail and effectively maintain it. It seems every year they have to reduce man power and make budget cuts.

I recently read an article in "Sunset" magazine. It said in 1995, Congress had authorized the park to buy 1.3 billion in private lands but had only appropriated barely 60 million dollars. What business does the government have purchasing more land when they do not have the money to properly maintain the land they have? The article also said that the entry fees collected at the National Parks

goes into the general fund and is used to help pay the deficit. This money should be put back into the Parks, with a percentage (at least half) going back into the park where it was collected. The writer of this article had a ten step plan to "save our parks." One idea was to release monies from the "Land and Water Conservation Fund," transfer the current balance of 11 billion and future reserves into an interest earning trust fund and require congress to release the earned interest (approx. 330 million per year) to public agencies for land acquisitions.

We disagree that the money should be used for land acquisition. It should be used for maintaining all our National Parks. (369 places set aside?) 330 million annually wouldn't even be 1 million a year for each place, but it would be with entry fees and allocated budget to hire more help, maintenance and salary increases. It would create jobs. Good jobs, not to mention conserve and preserve our Parks without shutting them down. I realize that because of bureaucracy this would not be easy, but it should not be complicated. Please do not allow this lake to slowly be turned into a lake that can only be seen from a canoe or row boat. Please do not take camping away from those who love to camp at the lake or shut down the beaches. Believe me when I say that these are the true future intentions of the Park.

I hope someone will read our letters and understand.

what is happening to the people who love all forms of recreation here.

Thankyou, Sincerely
Cathy J. Center

VALERIE J. HILL

JED
3014

1541

March 6, 1997

97 MAR 18 PM 12: 39

OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98302

David Morris, Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

RE: The Draft Lake Crescent Management Plan/EIS

Dear Sir:

I would like to express to the ONP that I am against all the plans they have proposed. I am for a **NO PLAN--NO CHANGE** policy.

I found that the meeting you held on January 16, 1997, was very ineffective. It was hard to hear the comments the public was making. I feel as if I'm being railroaded. The comments made and questions asked were just recorded not really addressed.

I am twenty-six years old and have had the opportunity to enjoy Lake Crescent for almost all of my life. I would like to know that my children, grand-children and their children have the opportunity to recreate in the same fashion I have. I have been very fortunate to have the opportunity to learn to swim, canoe, operate a boat, ride personal water craft, water-ski and many other recreational activities.

What activities do you want future generations to be involved in. Recreation like I've listed above or more gang or gun related activities. Maybe if they were given more opportunities to enjoy Lake Crescent instead of fewer there would be less violence among the younger generation.

Everyone's definition of "recreation" is different. Their isn't any reason why all users can't have access to the lake. ONP wants to pull all signs of use away from the lake front. This seems counter productive considering that the *thousands* of visitors are there to see and use the lake. The wake activity on the water has far less of an effect on the shoreline than that of the strong prevailing winds that stir up Lake Crescent. Are you going to try to harness it: in order to save all those non-motorized boats that get caught in these unpredictable prevailing winds every year and would usually be rescued by a land owner or visitor with a motorized boat or personal water craft.

The Olympic Peninsula is not considered a vacation "hot-spot" considering we don't have too many record breaking temperatures to lure the users to the lake. This is why I wouldn't consider Lake Crescent a high use lake. The majority of the year a passing car on highway 101 is unlikely to see any motorized vessel activity.

Putting one any of the plans in effect would be a great loss to the Olympic Peninsula. With the lack of the logging industry causing devastation over the last few years and the loss of Rayonier Mill, the last thing we, as a community, need is the loss of revenues due to a ban of motorized vessels, including personal watercraft, would cause to the community. Port Angeles Power

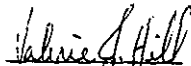
Equipment would lose a great deal in sales, along with every community gas station, restaurant, neighborhood grocery store. It is a normal stop for me on my way to Lake Crescent for gas for my vehicle and jet-ski or boat. At the same time I usually purchase a snack, a meal, a six-pack of pop, ice-cream, etc.

The plan does have some good improvement ideas of existing areas. However, where is the funding going to come from when they can't even afford to keep trash receptacles at the public boat launch areas. I suggest they improve the maintenance of the areas they already have.

Again, I would like to emphasis to the ONP that I am against all the plans they have proposed. I am for a **NO PLAN--NO CHANGE** policy.

Please include this letter in the official and permanent record relating to the development and approval of the Lake Crescent Management Plan/EIS.

Sincerely,



Valerie J. Hill

cc: Congressmen

1623

January 27, 1997

Regional Director
National Park Service
909 First Avenue
Seattle, WA 98104

Dear Regional Director:

Please vigorously oppose and urge abandonment of the proposed plan by Olympic National Park officials to allow jet skis and other motorized personal watercraft on a portion of the park's Lake Crescent.

Motorized personal watercraft produce offensive noise, interfere with wildlife, and conflict with the solitude and passive recreational uses sought by the vast majority of park visitors.

I am disappointed that Olympic National Park officials reportedly find the use of these motorized personal watercraft acceptable. I believe that allowing this use would establish a tragic and potentially dangerous precedent for the entire National Park System.

Thank you very much for considering my input.

Sincerely,


June Ringer

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March 17, 1997
FORT ANGELES, WA 98302

Superintendent Olympic National Park
Mr. David Morris
600 East Park Ave.
Port Angeles, WA 98362

Dear Mr. Morris,

I'm writing with my comments concerning the Draft Lake Crescent Management Plan.

There are many parts to this plan that concern me that contain no documented facts to back them up. It is my understanding that these million dollar EIS documents the park produces are supposed to contain facts, and supposed to cover both sides of the issue which is discussed. All I have seen in this document is how to limit the use of the lake both to private inholders and visitors. With the end result giving more to the park and less to the people. This goes against what the park was created for, "the people".

I personally object to my tax dollars being wasted on a document littered with unsupported assertions being passed off as facts. I find this an extremely costly and poor piece of work at a time when funding for the parks is at an all time low.

I strongly oppose construction of any new buildings in the Barns Point management area. New construction with associated clear cutting, habitat destruction, and the strong probability of soil erosion will be harmful to the environment and degrade the general ambiance of this historic area.

Regarding boat usage on the lake, I feel the National Park Service should use its resources to enforce existing laws about boating and personal watercraft usage. The National Park Service should not impose any new restrictions on where boats and personal watercraft can be operated, or on shoreline access or on any new limits on horsepower or speed. Therefore, I strongly oppose the Water Recreation components of Alternative A and Alternative D. I agree with the Watercraft Recreation component of Alternative B (no change). I agree with the Watercraft Recreation component of Alternative C, except that I oppose any change in no-wake zones. I am also very concerned with the lack of acknowledgment of the existing uses made by landowners. This should be made by including the language from the 1938 Act which created Olympic National Park.

Growing up in this area, and spending lots of time at Lake Crescent, I am very disturbed by the statement in the plan claiming the lake is overused. I feel this statement is false, and should be removed from the final draft EIS. I am wondering why the beginning of this EIS claims the lake is overused, yet the majority of it discusses how to make better facilities to draw more visitors to the lake. Doesn't this contradict your overused lake statement???

I also oppose the removal of RV sites both at Log Cabin Resort and Fairholm Campground. I feel to do so is to take away from visitors traveling with RV's who are seeking a truly natural experience.

I find the lack of including the East Beach Road connecting Hwy 101 with the Piedmont Road disturbing. With the many improvements mentioned, this road was not. I feel the road should be widened and resurfaced to accommodate today's RV's and larger vehicles to avoid accidents. As the road is today, it is extremely unsafe to everyone traveling on it.

I request that this comment be made part of the official and permanent record related to the development and approval of the Lake Crescent Management Plan/EIS. Please notify me personally if you are unable to include this document and my comments in the official Lake Crescent Management Plan/EIS record.

Sincerely,

Holly J. Buson

1506

March 17, 1997

Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

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RE: Draft Lake Crescent Management Plan/EIS

I have examined your September 1996, draft document. I know of no effort by the ONP to collect information or ideas from the general or local public before this draft was published. I suggest that a process for collecting comprehensive input from the local and general public be engaged prior to government spending on draft publications and "preferred alternatives". However, I am sure you keep your environmental planners/writers game-fully employed by publishing management plans and the likes prior to substantive input from the public.

As you end your comment period I imagine you will receive substantial public comment. I expect basically the general public will ask you not to add more zoning or restrictions but to enforce the ones you have in place. I concur with enforcing what you have in place instead of creating more restrictive use guidelines. Spend your budget wisely.

I believe your initial report is biased. Many statements illustrate biases. Somewhere in the draft you mentioned a huge parking lot. Huge really? What does huge mean? 20 parking spaces? 50 parking spaces. Welcome to 1997 as a huge parking lot is probably in excess of 100 spaces. Most of ONP facilities are not prepared to handle significant numbers of users in 1997 terms let alone the immediate future. But then again that is probably in conflict with your mission. Your draft also illustrates obvious biases against jet ski use. I imagine the population will become accustomed to jet ski use just as water skiing is no longer as out-landish as it was in the 1950's. I see no mention of large in-board engine high speed noisy boats use. Treat jet ski users as any other motor boats. Enforce your current regulations and focus on violators operating near "crowded" beaches. Lake Crescent does not really have crowded beaches. Actually annual users per acre is probably very low compared to other lakes with similar access within the USA.

What you do with adding restrictions will probably impact other smaller lakes in this general area.

I would appreciate any follow up information for management of Lake Crescent.

Sincerely,



Bill Lewis

COMMENT FORM
 DRAFT LAKE CRESCENT MANAGEMENT PLAN/EIS 1527

This comment form may be mailed to: Superintendent, Olympic National Park, 600 East Park Avenue, Port Angeles, WA 98362. Mail a copy to the Friends of Lake Crescent, 3634 North Stevens Street, Tacoma, WA 98407 or give to any board member or area representative.

Name (please print clearly): Norman Brooks

Mailing Address: _____

1. The Draft Plan does not respect the existing uses of Lake Crescent, by both private homeowners and visitors. Federal law requires that existing uses must be considered in an Environmental Impact Statement, EPA National Environmental Policy Act Procedures, 40 C.F.R. 6, section 6.203(c). Acknowledgment of existing uses made by landowners should be made by including the language from the 1938 Act which created Olympic National Park:

"Nothing contained herein shall affect any valid existing claim, location or entry made under the land laws of the United States, whether for homestead, mineral, right of way, or any other purpose whatsoever, or shall affect the right of any such claimant, locator, or entryman to the full use and enjoyment of his land, nor the rights reserved by treaty to the Indians of any tribes. The boundaries of Olympic National Park may be revised only by Act of Congress." (16 U.S.C. section 255, formerly sec. 5 of "An Act to Create Olympic National Park in the State of Washington," June 29, 1938.)

2. I think that the National Park Service should use its resources to enforce existing laws about boating and personal watercraft usage. The National Park Service should not impose any new restrictions on where boats and personal watercraft can be operated, or on shoreline access, or any new limits on horsepower or speed. Therefore, I oppose the Water Recreation components of Alternative A and Alternative D. I agree with the Watercraft Recreation component of Alternative B (no change). I agree with the Watercraft Recreation Component of Alternative C, except that I oppose any change in no-wake zones.

3. I oppose construction of any new buildings in the Barnes Point management area. New construction with associated clear cutting, habitat destruction, and the strong probability of soil erosion will be harmful to the environment and degrade the general ambiance of this historic area. Adequate government owned buildings exist to satisfy current administrative and operational needs without costly new construction.

4. I OPPOSE THE O. N. P.'S DEAY IN RE-OPENING THE LAPOEL CAMP GROUND WHICH WAS DEVELOPED BY THE U.S. FOREST SERVICE CREW UNDER ED. BROOKS IN EARLY 1920'S

5. THE ORIGINAL STORM KING FERRY WAS NOT RESTRICTED TO OPERATION BETWEEN EAST BEACH & FAIRHOLM BUT ALSO RAN FROM LOG CABIN RESORT AT PIEDMONT 1914-'20'S

I request this comment be made a part of the official and permanent record related to the development and approval of the Lake Crescent Management Plan/EIS. Please notify me personally if you are unable to include this document and my comments in the official Lake Crescent Management Plan/EIS record.

Signature Norman Brooks

PETITION TO PRESERVE OUR RECREATIONAL RIGHTS

To: Mr. David K. Morris, Superintendent
 Olympic National Park
 600 East Park Avenue
 Port Angeles, WA 98362

We, the undersigned, urge you to make no new rules restricting our use of motorized boats or Personal Water Craft on Lake Crescent. Adequate rules currently exist to satisfactorily restrict unsafe and noisy operation of Personal Water Craft or motorized boats. We believe the issue is operator conduct not the presence of Personal Water Craft or motorized boats. We urge you to use existing rules and regulations to control operator behavior. The owners and users of motorized boats and Personal Water Craft have the same right to use and enjoy Lake Crescent as any other user or visitor to Olympic National Park.

We request this comment be made a part of the official and permanent record related to the development and approval of the Lake Crescent Management Plan/EIS. Please notify us personally if you are unable to include this document and my comments in the official Lake Crescent Management Plan/EIS record.

Name NORMAN E. BROOKS

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 OLYMPIC NATIONAL PARK
 PORT ANGELES, WA 98362

Prepared by Friends of Lake Crescent, Port Angeles, Washington; mailing address: 3634 North Stevens Street, Tacoma, WA 98407. Write to us for more information, to join our organization, or to make a contribution. Thank you. Please return completed petitions to FOLC or send a copy.

Douglas H. Chadwick

1544

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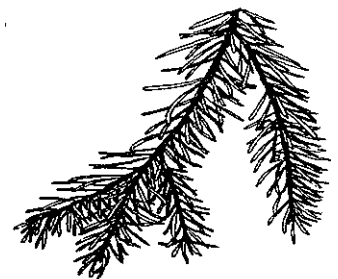
OLYMPIC NATIONAL PARK
PORT ANGELES, WA 98362

Dave Morris
Supt., Olympic NP

Dear Sir,

You must not allow the use of jet skis within Olympic NP. Our parks are the one place we can immerse ourselves in a different pace of life and hear what nature is like. These are increasingly precious values. You would also set a terrible precedent if you allow these obnoxious inventions in. Next, they will be roaring across Lake Ozette. Then Glacier Park, along with snowmobiles and whatever someone invents next to rob nature's peace and consume raw materials. How could you even consider this. Glacier and all our park system would suffer. You cannot allow Americans to have no alternative to mindless recreation. Your goal should be to uplift and ennoble the country's spirit.

D. H. Chadwick



Appendixes / Bibliography / Glossary / Preparers / Index

APPENDIX A: ADMINISTRATIVE RECORD DETAILING THE NPS DECISION TO BAN THE USE OF PERSONAL WATERCRAFT ON LAKE CRESCENT OLYMPIC NATIONAL PARK, WASHINGTON

INTRODUCTION

In response to public comment received on the Draft Lake Crescent Management Plan/Environmental Impact Statement (EIS) the National Park Service (NPS) has reevaluated the appropriateness of personal watercraft (PWC) use on Lake Crescent within Olympic National Park. This appendix provides an evaluation of the impacts associated with PWC use on Lake Crescent, including a determination of consistency of PWC use with protection of the park's natural, scenic, and aesthetic values and compatibility with NPS management objectives and safety considerations. This document serves as a written administrative record providing the basis for the park's management decision regarding the continued use of PWCs on Lake Crescent.

BACKGROUND

The term "personal watercraft" or "PWC" refers to a vessel usually less than 16 feet in length (measured from end to end, excluding sheer) which uses an inboard, internal combustion engine powering a water jet pump as its primary source of propulsion. The vessel is intended to be operated by a person or persons sitting, standing or kneeling on the vessel, rather than within the confines of the hull. PWCs are high performance vessels designed for speed and maneuverability and are often used to perform stunt-like maneuvers. PWCs include vessels commonly referred to as jet ski, waverunner, wavejammer, wetjet, sea-doo, wet bike and surf jet. The Personal Watercraft Industry Association (PWIA), which consists of about five or six PWC manufacturers, coined the term "Personal Watercraft".

Use of PWC on Lake Crescent is presently low, but appears to have been increasing over the last few years. The potential exists for considerable expansion of this use, both by local residents and by visitors from outside the immediate area. Concerns of park managers, summarized in this appendix, coupled with oral and written visitor complaints about PWCs have led the park to examine the appropriateness of PWC use on Lake Crescent.

POLICY AND REGULATIONS

The National Park Service has the necessary authority and mandates to protect Olympic National Park's valuable resources and to provide for enjoyment of these resources in ways that do not lead to their degradation. These policies and regulations recognize that the park cannot be all things to all people and that all uses cannot be accommodated.

The National Park Service Organic Act of 1916 (16 USC 1a-1) gives authority to the NPS to

...promote and regulate the use of the Federal areas known as national parks, monuments, and reservations...by such means and measures as conform to the fundamental purposes of the said parks, monuments and reservations, which purpose is to conserve the scenery and the natural and

historic objects and the wild life therein, and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

The Redwood Act of 1978 amends the Organic Act to reemphasize Congressional direction for all National Park Service lands.

Congress further reaffirms, declares, and directs that the promotion and regulation of the various areas of the National Park System...shall be consistent with and founded in the purpose established by the first section of the Act of August 25, 1916, to the common benefit of all the people of the United States. The authorization of activities shall be construed and the protection, management and administration of these areas shall be conducted in light of the high public values and purposes for which these areas have been established...

The Olympic National Park Act of June 29, 1938 directs the Secretary of the Interior to "...make and publish such general rules and regulations as he may deem necessary and proper for the management and care of the park..." It also states that the "...administration, protection, and development of the Olympic National Park shall be exercised under the direction of the Secretary of the Interior by the National Park Service..."

The Olympic National Park Master Plan of October 1976 sets forth the management concept for the park. In the introductory paragraphs, this document sets the tone for what the park should be:

People have strong feelings about this exceptional resource. Many say "the system should be protected and preserved", while others say "it should be used." All are right. It should be protected, preserved and used — but used not as a museum piece, nor as an "escape" for a fun time. Rather, it must be used to nourish and enrich the life of man.

Olympic's wilderness values are superlative. As our technology races ahead, our need for the special peace and renewal of the human spirit that undeveloped, unspoiled wild lands can offer us increases proportionately.

The *United States Code* (16 USC 1, 1a-2(h), 3) gives the National Park Service authority to regulate boating activities within areas of the National Park System, "including areas subject to the jurisdiction of the United States," further stating "that any regulation adopted...shall be complementary to and not in derogation of the authority of the U.S. Coast Guard to regulate the use of waters subject to the jurisdiction of the United States."

The Legislative History of 16 USC 1a-2(h) set forth in House Report No. 94-1569 states, "Secretary (of the Interior) is specifically authorized to promulgate and enforce regulations concerning boating..." and "such regulations would be promulgated for the purpose of...protecting the natural, wildlife, cultural and historical resources."

As further described in House Report No. 94-1569, the U.S. Coast Guard takes the position that "The exclusion of a type of vessel or activity, then, does not fall under an area for which the U.S. Coast Guard reserves judgment, but for which the Department of Interior says is necessary for...protecting the natural, wildlife...resources."

U.S. Coast Guard regulations classify PWCs as Class A motorboats along with other watercraft meeting the criteria. Some have suggested that it is arbitrary to restrict PWCs and not other Class A motorboats. In PWIA v. the Department of Commerce, NOAA, 48 F.3d 540, (U.S. Court of Appeals, D.C. Cir. 1995), the court states, "the [marine sanctuary's] regulations did indeed single out personal watercraft from other kinds of vessels" and "Regulations ... are not arbitrary just because they fail to regulate everything that could be thought to pose any sort of problem."

Jurisdictional authorities throughout the United States have recognized the differences between PWCs and other Class A motorboats and have specifically regulated PWC use.

On June 22, 1998, the National Park Service released a system-wide Interim Management Policy for Personal Watercraft Use (NPS 1998a). Effective upon its release, this policy will remain in effect until rulemaking on this subject is completed, probably within a year. The proposed rule (NPS 1998b) is expected to be published in the Federal Register during the summer of 1998, with a 60-day public comment period to follow. The interim management policy directs superintendents to use the procedures set forth in 36 CFR 1.5 and 1.7 to close waters to PWC use in units of the National Park System where use has not been significant prior to 1998, and in units with significant use to manage PWC use by adopting appropriate compendium measures (e.g., restrict, prohibit). Based on observations by Lake Crescent rangers, the level of PWC use on the lake is currently low. PWC use on Lake Crescent varies according to weather, season and day of the week; rangers estimate that, on a typical weekday in summer, when weather is favorable, there are generally 10 to 15 PWCs in use on the lake (Dan Mason, District Ranger; Art Sandison, Park Ranger, pers. comm.). Use often increases during warm, sunny weekends, though no more than 30 to 40 PWCs is typical (Dan Pontbriand, Park Ranger, pers. comm.).

Canyonlands National Park, Everglades National Park and Yellowstone National Park have banned PWCs on all park waters. Glacier National Park has a temporary prohibition on PWCs in effect.

Other federal and state agencies have also placed regulations on PWC use within their jurisdictions. The Monterey Bay National Marine Sanctuary, for example, has limited PWC operation to four designated zones and access routes in the Sanctuary. Challenged in court, the limitation was unanimously upheld in the U.S. Court of Appeals for the District of Columbia Circuit.

At least 43 states have implemented some type of legislation or regulations directed at PWC use. Other examples of PWC-specific regulation can be found outside of the United States. In Canada, PWCs have been banned, zoned or deemed an inappropriate use in Waterton Lakes National Park, Algonquin Provincial Park and in Vancouver, British Columbia. Venezuela has placed a total ban on PWCs in its three national parks with beachfronts.

IMPACTS ON VISITOR USE

Many of the actual and potential impacts from PWCs are concerned with human issues, in addition to natural resource issues. As evidenced by letters received by the park before, during and after the EIS public comment period, a prohibition on PWC use on Lake Crescent would improve the experience of many park visitors and minimize conflict with other park users. As described in these letters, the character and level of PWC noise, their frequent proximity to other boats and to the shoreline, and type of use all have an impact

on people's enjoyment of Lake Crescent. Visitor expectations and experience, safety, economics, impacts on PWC operators and impacts on park management have all been carefully considered.

Recreational development at Olympic National Park is intended to provide opportunities for quiet, solitude, peacefulness, and a close, intimate relationship with the natural world.

Many verbal complaints, as well as approximately 75 letters unrelated to the EIS process have been received by the park from visitors who have been unable to experience and enjoy the natural serenity of Lake Crescent because of the noise of PWCs. Despite the presence of traffic noise from U.S. 101 and other park roads and the presence of motorboats, including fishing and waterski craft, it is the particular noise produced by PWCs that visitors describe as most annoying. The erratic changes in engine pitch, the pulsation of sound produced by jumping wakes and frequent changes in speed, in addition to the volume of the noise are what many visitors cite as irritating. The character of PWC noise differentiates it from the background drone of road traffic and from other motorboats used for touring, fishing or waterskiing.

ENVIRONMENTAL IMPACTS

There are adverse environmental impacts from PWC use at Lake Crescent. Given these impacts, to allow the use of PWCs and subsequently determine that such use is harmful fails to meet NPS responsibilities and would result in unnecessary and avoidable damage to park resources.

Park rangers have observed impacts from PWCs to Lake Crescent wildlife such as river otters and a variety of waterfowl, including direct disturbance to animals, resulting in their alarm and flight from the area (Dan Pontbriand and John Ward, Park Rangers, pers. comm.) Studies conducted elsewhere have shown impacts to wildlife including the interruption of activity, alarm and flight; avoidance and displacement; permanent loss of habitat use; decreased reproductive success; interference with movement; direct mortality; interference with courtship; alteration of behavior; change in community structure; and nest abandonment (NPS 1995c). Bald eagles, a threatened species under the Endangered Species Act, have nested at Lake Crescent in the past and may still do so. Two other threatened species, the northern spotted owl and the marbled murrelet, are also known to use the Lake Crescent area. Northern spotted owls have been monitored in the Lake Crescent watershed since 1988; in the past ten years, at least five nesting territories are known to have been used (Erran Seaman, U.S.G.S. Biological Resource Division, Olympic Field Station, ecologist, pers. comm.). The Lake Crescent watershed also contains habitat suitable for marbled murrelets. Surveys conducted by park staff in 1997 documented behavior typically associated with nesting, indicating that murrelets likely nest in the area. Surveys in 1998 also documented the presence of murrelets in the area (Shelley Hall, Olympic National Park Natural Resources Management Specialist, pers. comm.).

PWCs are very maneuverable, can operate well in very shallow water (less than 12") and can be launched from practically any site that has reasonable access to water. These activities can have detrimental impacts on shoreline vegetation (NPS 1995c). Of particular concern are rare aquatic plants such as *Lobelia dortmanna*, which is listed by Washington state as a threatened species.

Nearly all of the PWCs currently in use are powered by two-stroke engines, which do not completely burn the mixture of oil and gasoline delivered to the combustion chamber. U.S. Environmental Protection Agency (EPA) studies have indicated that two-stroke engines lose roughly 25% of the fuel they consume

unburned into the water, resulting in high levels of hydrocarbon emissions from these engines (U.S. Environmental Protection Agency 1991).

The EPA has since implemented standards to address the impacts resulting from these emissions. The rule went into effect in 1996, but the standards are not required to begin until the model year 1998 for outboard engines, and in 1999 for personal watercraft (Tahoe Regional Planning Agency 1997).

APPROPRIATENESS WITHIN A NATIONAL PARK SETTING

As intended by legislative mandates and the Olympic National Park Master Plan, the park should foster an understanding and appreciation of its natural setting and resources, as well as a sense of environmental stewardship, while not adversely affecting park resources or the experience of park visitors.

Motorboat use at Lake Crescent is structured for the continuation of traditional activities such as fishing, sightseeing and water skiing. These activities are not generally supported by PWCs.

Operating a PWC does not give the participant a unique perspective on park resources and is not primarily dependent on park values. Park themes are very difficult to experience while operating a PWC. Generally, the maneuverability and quickness of PWCs require that more attention be paid to their operation, as compared to other types of watercraft.

Observations of PWC use indicate that they are not, for the most part, being used for transportation, but as a means for seeking challenge or fun. PWCs are fast, small, highly maneuverable and frequently operated close to shore. Most operators seem to be seeking the freedom, excitement and maneuverability that PWCs offer. These opportunities can be found outside the park.

PWC use near developed areas around Lake Crescent has caused disturbance of NPS interpretive programs and has drawn complaints from campers, picnickers, day users, overnight lodge patrons, swimmers and other boaters.

In administering a large national park such as Olympic, park staff must respond to visitor use of technological innovations, determine the threats they may pose to the park's natural and cultural resources and to visitor enjoyment of those resources, and allow, regulate or prohibit use of such innovations as appropriate. Use of float planes, hovercraft, snowmobiles, hang gliders, parasails, hot air balloons, trail motorcycles, mountain bikes, roller skates, skateboards, audio equipment, chain saws and weapons are all subject to strict regulations or prohibitions on their use in the park.

SAFETY CONCERNS

The safety record for PWCs shows a disproportionate level of PWC accidents and injuries relative to the numbers of this type of vessel, and is cause for concern at Lake Crescent. In Wisconsin, PWCs accounted for 3.15% of registered boats in 1996, yet were responsible for 34% of all boating accidents, 32% of injuries and 13.3% of fatalities. Similar records exist for other states. In California in 1996, 16% of all registered vessels were PWCs, yet PWCs were involved in 45% of all boating accidents and 55% of all

injuries. Since 1995, a total of six boating accidents have been reported at Lake Crescent. Four of these involved PWCs; two of the PWC accidents resulted in injuries requiring hospital treatment (NPS 1998c).

In a report released in May, 1998, the National Transportation Safety Board noted that while the overall number of recreational boating fatalities has been declining in recent years, the number of personal watercraft-related fatalities has been increasing (National Transportation Safety Board 1998).

PWCs are considered easy to maneuver and nearly impossible to capsize, letting relatively inexperienced users attempt a variety of stunts that would be impossible in a traditional motorboat (e.g., jumping waves, turning in tight circles). PWCs can also foster a false sense of security that may allow some operators to forget the basic rules of boating safety. Some craft can accelerate from 0 to 50 mph in approximately five seconds and can exceed speeds of 60 miles per hour. They also lose much of their turning ability when the operator releases the throttle (San Francisco Chronicle, 12/30/97).

EFFECT OF PWC BAN ON PWC USERS

There are adequate opportunities for PWC use outside Olympic National Park and where such use is more appropriate.

PWC operators appear to be primarily area residents and are often repeat users of Lake Crescent. PWC users from outside the area are extremely rare (John Ward, Park Ranger, pers. comm.). With the relatively low demand for this activity, which, as noted in numerous letters from the public, is disturbing to so many park users, only a small percentage of park visitors would be negatively impacted by a ban on PWC. In the absence of a ban and as the use of PWCs grows, more and more park visitors would be impacted by the continued use of PWCs on Lake Crescent.

Because opportunities for PWC use exist outside the park and since the current level of PWC use on Lake Crescent is low, the economic effect of prohibiting PWCs from Lake Crescent would likely be minimal.

Nearby Lake Sutherland, outside the park, though much smaller than Lake Crescent, allows PWC use with limited restrictions. Opportunities for salt water use of PWCs abound both locally and regionally.

EFFECT OF PWC BAN ON NEARBY WATERS

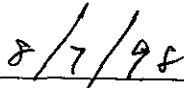
Non-park lakes near Lake Crescent would likely be subject to increased PWC use as it is displaced from the park. Lake Sutherland, one mile to the east and much smaller than Lake Crescent, is already used by PWC operators from the Port Angeles area and would likely receive higher use after Lake Crescent is closed to PWC use. Displaced PWC operators would likely be dispersed into other popular lakes and waterways in the region as well.

FINDINGS

Based on the above analysis, PWC use on Lake Crescent has been determined to pose a threat to park resources and values and adversely affects the experience of other park visitors, particularly those seeking a resource-based experience dependent on a national park setting. Therefore, the use of PWC is hereby banned from all parts of Lake Crescent in Olympic National Park.



Superintendent, Olympic National Park



Date

APPENDIX B: OLYMPIC NATIONAL PARK ANNUAL VISITATION

| Year | Annual Visits | Year | Annual Visits |
|-------------|----------------------|-------------|----------------------|
| 1997 | 5,023,302 | 1967 | 1,905,281 |
| 1996 | 4,332,787 | 1966 | 1,751,951 |
| 1995 | 4,684,483 | 1965 | 2,058,042 |
| 1994 | 4,261,561 | 1964 | 1,343,570 |
| 1993 | 3,533,767 | 1963 | 1,576,161 |
| 1992 | 3,694,838 | 1962 | 2,044,422 |
| 1991 | 3,368,182 | 1961 | 1,519,514 |
| 1990 | 3,514,079 | 1960 | 1,160,429 |
| 1989 | 3,360,555 | 1959 | 1,077,420 |
| 1988 | 3,519,181 | 1958 | 1,181,325 |
| 1987 | 3,362,535 | 1957 | 864,849 |
| 1986 | 3,474,720 | 1956 | 864,599 |
| 1985 | 3,052,470 | 1955 | 774,885 |
| 1984 | 3,260,632 | 1954 | 663,120 |
| 1983 | 2,874,958 | 1953 | 625,703 |
| 1982 | 2,953,210 | 1952 | 449,117 |
| 1981 | 2,754,514 | 1951 | 414,999 |
| 1980 | 2,482,305 | 1950 | 405,347 |
| 1979 | 2,589,420 | 1949 | 392,508 |
| 1978 | 2,996,565 | 1948 | 189,164 |
| 1977 | 2,658,922 | 1947 | 182,164 |
| 1976 | 2,672,458 | 1946 | 121,712 |
| 1975 | 2,654,726 | 1945 | 103,817 |
| 1974 | 2,479,266 | 1944 | 58,414 |
| 1973 | 2,817,040 | 1943 | 53,257 |
| 1972 | 3,031,653 | 1942 | 75,890 |
| 1971 | 1,859,742 | 1941 | 92,986 |
| 1970 | 2,283,071 | 1940 | 91,863 |
| 1969 | 2,135,917 | 1939 | 40,650 |
| 1968 | 2,013,810 | | |

LAKE CRESCENT ANNUAL VISITATION

(Tallies all day and overnight use, including a percentage of through-park travel on U.S. 101)

| Year | Annual Visits | Year | Annual Visits |
|------|---------------|------|---------------|
| 1997 | 2,842,758 | 1991 | 1,806,634 |
| 1996 | 2,398,075 | 1990 | 1,991,387 |
| 1995 | 2,515,592 | 1989 | 1,779,371 |
| 1994 | 2,275,709 | 1988 | 1,851,488 |
| 1993 | 1,980,479 | 1987 | 1,799,673 |
| 1992 | 1,750,982 | | |

FAIRHOLM CAMPGROUND ANNUAL USAGE

| Year | Annual Use | Year | Annual Use |
|------|------------|------|------------|
| 1997 | 14,625 | 1991 | 16,571 |
| 1996 | 19,113 | 1990 | 17,724 |
| 1995 | 15,100 | 1989 | 19,685 |
| 1994 | 17,675 | 1988 | 19,573 |
| 1993 | 16,195 | 1987 | 15,769 |
| 1992 | 18,182 | | |

CONCESSIONER ANNUAL ROOM RENTALS Lake Crescent Lodge

| Year | Rooms Occupied | Rooms Available | Year | Rooms Occupied | Rooms Available |
|------|----------------|-----------------|------|----------------|-----------------|
| 1996 | 6,565 | 9,121 | 1991 | 7,445 | 8,852 |
| 1995 | 6,950 | 9,514 | 1990 | 6,494 | 7,558 |
| 1994 | 7,228 | 9,988 | 1989 | 5,603 | 6,665 |
| 1993 | 7,447 | 9,972 | 1988 | 6,330 | 7,426 |
| 1992 | 7,118 | 9,653 | | | |

**CONCESSIONER ANNUAL ROOM RENTALS
Log Cabin Resort**

| Year | Rooms Occupied | Rooms Available | Year | Rooms Occupied | Rooms Available |
|------|----------------|-----------------|------|----------------|-----------------|
| 1996 | 3,943 | 7,414 | 1991 | 3,496 | 4,236 |
| 1995 | N/A | N/A | 1990 | 3,131 | 4,004 |
| 1994 | 3,392 | 4,156 | 1989 | 2,938 | 3,658 |
| 1993 | 3,488 | 3,920 | 1988 | 3,131 | 4,004 |
| 1992 | 3,673 | 4,592 | | | |

**AVERAGE DAILY TRAFFIC ON U.S. 101 BETWEEN FAIRHOLM
AND EAST BEACH ROAD**

*(Washington State Department of Transportation statistics, as reported in
Annual State Highway Accident Reports, 1988-1996)*

| Year | Average Daily Traffic | Year | Average Daily Traffic |
|------|-----------------------|------|-----------------------|
| 1996 | 2,450 | 1991 | 2,500 |
| 1995 | 2,500 | 1990 | 2,850 |
| 1994 | 2,550 | 1989 | 2,500 |
| 1993 | 2,500 | 1988 | 2,750 |
| 1992 | 2,450 | 1987 | 3,600 |

APPENDIX C: SUMMARY OF CULTURAL RESOURCE IMPACTS OF THE ALTERNATIVES

| PROGRAM ELEMENTS | | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) | Potential to Effect Resources | Known Resources Present ⁴ | Inventory Required |
|--------------------------------|---|---------------------------------------|------------------------------|---|---------------|--|-------------------------------------|--|---|
| FAIRHOLM | | | | | | | | | |
| Planning/Administration | | | | | | | | | |
| 1 | Develop an overall site design | YES | NO | YES | YES | YES | YES | * | archeological ethnographic cultural landscape historic structure |
| 2 | Develop an overall trail plan | YES | NO | YES | YES | YES | YES | * | archeological |
| 3 | Retain the store | YES (relocate and add parking) | YES (no improvements) | YES (improve appearance and add parking) | NO | YES (relocate and add parking) | YES | * | archeological |
| 4 | Convert current store parking into a scenic overlook with interpretive display | NO | NO | NO | NO | YES | YES | * | archeological |
| 5 | Concession option to operate a food service such as a restaurant or snack bar | YES (in-store only) | YES | YES (either in-store or separate building) | NO | YES | NO | * | NA |
| Accommodations | | | | | | | | | |
| 6 | Reconfigure the campground: designate RV sites separate from tent sites; improve pedestrian circulation; revegetate; no RV hook-ups | YES | NO | NO | NO | NO | YES | * | archeological ethnographic cultural landscape |

⁴**Known Resources Present:**

* = Project area has not been inventoried for cultural resources

LCLHD = Lake Crescent Lodge Historic District

RHD = Rosemary Inn Historic District

| PROGRAM ELEMENTS | | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) | Potential to Effect Resources | Known Resources Present ⁴ | Inventory Required |
|-----------------------|---|---------------------------------------|--|---------------|-----------------------------|---|-------------------------------------|--|---|
| Accommodations | | | | | | | | | |
| 7 | Reconfigure the campground: provide separate loops for RV sites and tent sites; improve pedestrian circulation; revegetate; provide RV hook-ups | NO | NO | YES | NO | YES | YES | * | archeological ethnographic cultural landscape |
| 8 | Reconfigure the campground: improve pedestrian circulation; revegetate; no RVs | NO | NO | NO | YES | NO | YES | * | archeological ethnographic cultural landscape |
| Recreation | | | | | | | | | |
| 9 | Concession option to provide boat rental service | YES | YES | YES | NO | YES | NO | * | NA |
| 10 | Concession option to provide bike rental service | YES | NO | YES | NO | YES | NO | * | NA |
| 11 | Designate a picnic area | NO | NO | YES | NO | YES | YES | * | archeological |
| 12 | Retain designated swimming area | YES | YES | YES | NO | YES | NO | * | NA |
| 13 | Retain boat ramp and reconstruct dock | YES | YES (but do not reconstruct dock) | YES | NO | YES (improve boat ramp and dock) | NO | * | NA |
| Environmental | | | | | | | | | |
| 14 | Remove campsites along shoreline; revegetate area | YES | NO | NO | YES | NO (but revegetate as appropriate) | YES | * | archeological |
| 15 | Remove underground boat fuel tank and install an above-ground fuel tank | YES | YES | YES | NO (remove tank only) | YES | YES | * | archeological |

| PROGRAM ELEMENTS | | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) | Potential to Effect Resources | Known Resources Present ⁴ | Inventory Required |
|--------------------------------|--|--|------------------------------|---------------|---------------|--|-------------------------------------|--|---|
| BARNES POINT | | | | | | | | | |
| Planning/Administration | | | | | | | | | |
| 1 | Develop an overall site design | YES | NO | YES | YES | YES | YES | 1. LCLHD 2. RHD | archeological ethnographic cultural landscape historic structure |
| 2 | Develop an overall trail plan | YES | NO | YES | YES | YES | YES | 1. LCLHD 2. RHD | archeological cultural landscape |
| 3 | Concession option to increase the number of units at Lake Crescent Lodge, not to exceed a 10% increase in existing units | YES (first investigate feasibility of project) | NO | YES | NO | YES (after careful study) | YES | 1. LCLHD | archeological |
| Accommodations | | | | | | | | | |
| 4 | Construct a multi-use facility at Lake Crescent Lodge | NO | NO | YES | NO | NO | YES | 1. LCLHD | archeological |
| Recreation | | | | | | | | | |
| 5 | Repair/replace existing dock or construct new dock at Lake Crescent Lodge | YES | NO | NO | NO | YES | YES | 1. LCLHD | cultural landscape historic structure |
| 6 | Construct a second small boat dock at the existing boat ramp | NO | NO | YES | NO | YES | YES | * | archeological |
| 7 | Install an accessible restroom at Bovee's Meadow with water and sewer hook-ups | YES | NO | YES | NO | YES | YES | * | archeological |
| 8 | Relocate the picnic area at Bovee's Meadow away from the shoreline | YES | NO | YES | YES | NO | YES | * | archeological |
| 9 | Establish a buoyed swimming area at Bovee's Meadow | NO | NO | YES | NO | NO | NO | * | NA |

| PROGRAM ELEMENTS | | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) | Potential to Effect Resources | Known Resources Present ⁴ | Inventory Required |
|-----------------------------------|--|---------------------------------------|------------------------------|---------------|---------------|--|-------------------------------------|--|---|
| Recreation | | | | | | | | | |
| 10 | Close the beach at Bovee's Meadow to day use; revegetate area | NO | NO | NO | YES | NO | YES | * | archeological |
| Transportation/Circulation | | | | | | | | | |
| 11 | Obliterate/revegetate the social trails between Bovee's Meadow and Barnes Creek | YES | NO | YES | YES | YES (convert some social trails to established trails) | YES | 1. LCLHD | archeological cultural landscape |
| 12 | Analyze parking needs and expansion opportunities near the Storm King Ranger Station for automobiles and boat trailers | NO | NO | YES | NO | NO (construct additional boat trailer parking by expanding existing facility) | YES | Morgenroth Cabin | archeological cultural landscape |
| Interpretation/Orientation | | | | | | | | | |
| 13 | Establish an interpretation/orientation focus at the Storm King Ranger Station; relocate park administrative functions to the Carter House | YES | NO | YES | YES | NO | YES | Morgenroth Cabin | historic structure |
| Environmental | | | | | | | | | |
| 14 | Construct an above-ground fuel tank and offer boat fuel at launch ramp | NO | NO | NO | NO | YES | YES | * | archeological |
| LOG CABIN | | | | | | | | | |
| Accommodations | | | | | | | | | |
| 1 | Develop an overall site design | YES | NO | YES | YES | YES | YES | * | archeological ethnographic cultural landscape historic structure |

| PROGRAM ELEMENTS | | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) | Potential to Effect Resources | Known Resources Present ⁴ | Inventory Required |
|-----------------------------------|---|---------------------------------------|--|---------------|---------------|---|-------------------------------------|--|---|
| Accommodations | | | | | | | | | |
| 2 | Develop an overall trail plan | YES | NO | YES | YES | YES | YES | * | archeological |
| 3 | Remove the A-frame units and locate replacement units away from the shoreline | YES | NO | NO | YES | NO | YES | * | cultural landscape historic structure |
| 4 | Replace some RV camping with cabins | YES | NO | NO | NO | NO | YES | * | archeological cultural landscape |
| 5 | Close the RV camping area and revegetate | NO | NO | NO | YES | NO | YES | * | archeological cultural landscape |
| Recreation | | | | | | | | | |
| 6 | Retain boat ramp and reconstruct dock | YES | YES (but do not reconstruct dock) | YES | NO | YES (upgrade both structures) | NO | * | NA |
| 7 | Reserve the lakefront for day use | NO | YES | YES | NO | YES | NO | * | NA |
| 8 | Concession option to provide boat rental service | YES | YES | YES | NO | YES | NO | * | NA |
| 9 | Concession option to provide bike rental service | YES | NO | YES | NO | YES | NO | * | NA |
| Transportation/Circulation | | | | | | | | | |
| 10 | Provide additional parking | YES | NO | YES | NO | YES (on south side of East Beach Road) | YES | * | archeological cultural landscape historic structure |

| PROGRAM ELEMENTS | | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) | Potential to Effect Resources | Known Resources Present ⁴ | Inventory Required |
|-----------------------------------|---|--|------------------------------|---------------|---------------|---|-------------------------------------|--|---|
| Interpretation/Orientation | | | | | | | | | |
| 11 | Consider establishing an interpretation/orientation program focusing on Euroamerican settlement in the Lake Crescent area | YES | NO | NO | NO | YES | NO | * | NA |
| Environmental | | | | | | | | | |
| 12 | Install an above-ground fuel tank and provide public boat fueling | YES | NO | YES | NO | YES | YES | * | archeological |
| LA POEL | | | | | | | | | |
| Planning/Administration | | | | | | | | | |
| 1 | Develop an overall site design | YES | NO | YES | YES | YES | YES | * | archeological ethnographic cultural landscape historic structure |
| 2 | Develop an overall trail plan | YES | NO | YES | YES | YES | YES | * | archeological |
| 3 | Close the area to camping; remove existing campsites; revegetate area | NO | NO | NO | YES | NO | YES | * | archeological cultural landscape |
| 4 | Determine the need for a seasonal, trailer-mounted snack bar concession | NO | NO | NO | NO | YES | NO | * | NA |
| Accommodations | | | | | | | | | |
| 5 | Establish a tent camping area | YES (investigate feasibility of establishing tent sites) | NO | YES | NO | YES (maintain campground with half tent sites, half day use) | YES | * | archeological cultural landscape historic structure |

| PROGRAM ELEMENTS | | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) | Potential to Effect Resources | Known Resources Present ⁴ | Inventory Required |
|-----------------------------------|---|---------------------------------------|------------------------------|---------------|-----------------------------|--|-------------------------------------|--|---|
| Recreation | | | | | | | | | |
| 6 | Retain day use and picnicking | YES (away from creek) | YES | NO | YES (away from creek) | YES | YES | * | archeological cultural landscape |
| 7 | Improve beach access through selective removal of vegetation from the shoreline | NO | NO | YES | NO | YES | NO | * | NA |
| 8 | Construct a boat ramp and dock | NO | NO | YES | NO | YES | YES | * | archeological |
| Interpretation/Orientation | | | | | | | | | |
| 9 | Designate a swimming area | NO | NO | NO | NO | YES | NO | * | NA |
| 10 | Erect information kiosk to interpret CCC/resort history of area | NO | NO | NO | NO | YES | YES | * | archeological cultural landscape |
| EAST BEACH | | | | | | | | | |
| Planning/Administration | | | | | | | | | |
| 1 | Develop an overall site design | YES | NO | YES | YES | YES | YES | * | archeological ethnographic cultural landscape historic structure |
| 2 | Develop an overall trail plan | YES | NO | YES | YES | YES | YES | * | archeological |
| 3 | Determine the need for a seasonal, trailer-mounted snack bar concession | NO | NO | NO | NO | YES | NO | * | NA |
| 4 | Limit the use of East Beach and revegetate | NO | NO | NO | YES | NO | YES | * | archeological |
| Accommodations | | | | | | | | | |
| 5 | Install new accessible toilets (vault or composting) | YES | NO | YES | NO | YES (construct permanent toilets) | YES | * | archeological |

| PROGRAM ELEMENTS | | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) | Potential to Effect Resources | Known Resources Present ⁴ | Inventory Required |
|-----------------------------------|--|---------------------------------------|------------------------------|---------------|---------------|---|-------------------------------------|--|---|
| Recreation | | | | | | | | | |
| 6 | Construct a launch area with boat ramp and dock | NO | NO | NO | NO | YES | YES | * | archeological |
| Transportation/Circulation | | | | | | | | | |
| 7 | Redesign the parking area and move it away from the shoreline (short-term improvement) | YES | NO | YES | NO | YES | YES | * | archeological |
| Interpretation/Orientation | | | | | | | | | |
| 8 | Designate beach parking for visitors with disabilities only and construct an upper parking lot with a trail to the beach (long-term improvement) | YES | NO | YES | NO | YES (doesn't specify where additional parking located) | YES | * | archeological |
| 9 | Investigate the feasibility of building a trail with a scenic overlook on the Fisher parcel | YES | NO | YES | NO | NO | YES | * | archeological |
| NORTH SHORE | | | | | | | | | |
| Planning/Administration | | | | | | | | | |
| 1 | Develop an overall site design | YES | NO | YES | YES | YES | YES | Spruce Railroad | archeological ethnographic cultural landscape historic structure |
| 2 | Develop an overall trail plan | YES | NO | YES | YES | YES | YES | * | archeological |
| 3 | Provide positive fire protection measures | NO | NO | NO | NO | YES | NO | * | NA |

| PROGRAM ELEMENTS | | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) | Potential to Effect Resources | Known Resources Present ⁴ | Inventory Required |
|-----------------------|--|---------------------------------------|------------------------------|--|---------------|--|-------------------------------------|---|---|
| Accommodations | | | | | | | | | |
| 4 | Develop interpretive displays at both ends of the Spruce Railroad trail | YES | NO | YES (develop interpretive kiosk along trail) | NO | NO (locate kiosk in picnic area only) | YES | Spruce Railroad | archeological ethnographic cultural landscape historic structure |
| 5 | Install accessible toilets in the North Shore picnic area | YES | NO | YES | NO | YES (construct permanent toilets) | YES | * | archeological |
| Recreation | | | | | | | | | |
| 6 | Install accessible toilets at both ends of the Spruce Railroad trail | YES | YES | YES | NO | YES (construct permanent toilets) | YES | Spruce Railroad; historic arch. site | archeological cultural landscape historic structure |
| 7 | Develop backcountry walk- or bike-in campsites along the Spruce Railroad trail | NO | NO | YES | NO | NO | YES | Spruce Railroad | ?? |
| 8 | Expand the North Shore picnic area by opening it to overnight camping (tents only) | NO | NO | NO | NO | YES | YES | * | archeological |
| 9 | Improve the Spruce Railroad grade to the western park boundary as a non-motorized, multi-purpose trail | YES | NO | YES | NO | YES (but do not cross private property and provide for landowner protection) | YES | Spruce Railroad; historic arch. site | archeological ethnographic historic structure |
| 10 | Improve the North Shore picnic area | YES | NO | YES | NO | YES | YES | Spruce Railroad; historic arch. site | archeological cultural landscape |

| PROGRAM ELEMENTS | | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) | Potential to Effect Resources | Known Resources Present ⁴ | Inventory Required |
|------------------------------------|---|---------------------------------------|------------------------------|---------------|---------------|--|-------------------------------------|--|---|
| Transportation/Circulation | | | | | | | | | |
| 11 | Analyze parking needs and provide for modest expansion at the east and west ends of the Spruce Railroad trail | YES | NO | YES | NO | YES | YES | Spruce Railroad; historic arch. site | archeological cultural landscape historic structure |
| 12 | Construct additional parking spaces at the North Shore picnic area | NO | NO | NO | NO | YES | YES | * | archeological |
| 13 | Gate the North Shore Road past the picnic area | NO | NO | YES | NO | NO | YES | Spruce Railroad | archeological |
| VISITOR SERVICES/FACILITIES | | | | | | | | | |
| 1 | Establish U.S. 101 within Olympic National Park as a parkway emphasizing the human and natural history of the lake | YES | NO | YES | NO | NO | YES | * | CCC elements cultural landscape historic structure |
| 2 | Erect attractive entry signs at the eastern and western entrances to Olympic National Park at Lake Crescent | YES | NO | YES | YES | NO | YES | * | archeological cultural landscape |
| 3 | Install park entrance signs along East Beach Road | YES | NO | YES | YES | NO | YES | * | archeological |
| 4 | Investigate the feasibility of establishing an information/orientation facility on U.S. 101 east of the intersection with East Beach Road | YES | NO | YES | NO | YES | NO | * | NA |
| 5 | Provide additional restroom facilities throughout the Lake Crescent area | YES | NO | YES | NO | YES | YES | * | archeological |
| TRANSPORTATION/CIRCULATION | | | | | | | | | |
| 1 | Investigate the feasibility of widening East Beach Road, Piedmont Road, and Lyre River Road to improve safety and accommodate bicycles | YES | NO | YES | NO | YES | YES | * | archeological |

| PROGRAM ELEMENTS | | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) | Potential to Effect Resources | Known Resources Present ⁴ | Inventory Required |
|-----------------------------------|---|--|---------------------------------|----------------------------------|--|--|-------------------------------------|--|-----------------------|
| TRANSPORTATION/CIRCULATION | | | | | | | | | |
| 2 | Improve U.S. 101, East Beach Road and Piedmont Road by widening, straightening, and adding bicycle/pedestrian lanes; improve Lyre River Road by widening, adding bicycle/pedestrian lanes and paving to the Spruce Railroad trailhead | NO | NO | NO | NO | YES | YES | * | archeological |
| 3 | Support the operation of a commercial educational tour boat | YES | YES | YES | NO | YES (also provide charter service) | NO | * | NA |
| 4 | Explore the feasibility of adding tour boat stops around the lake | YES | NO | YES | NO | YES | NO | * | NA |
| WATER RECREATION | | | | | | | | | |
| 1 | Allow motorized boats | YES 100/300-yard no-wake zone ⁵ | YES 50-yard no- wake zone | YES 100-yard no- wake zone | YES 100/300-yard no-wake zone ⁵ | YES 50-yard no- wake zone | NO | * | NA |
| 2 | Prohibit the use of personal watercraft (PWC) | YES | YES | YES | YES | See footnote ⁶ | NO | * | NA |
| 3 | Retain shoreline access for boats | YES | YES | YES | NO | YES | NO | * | NA |
| 4 | Establish a designated speed limit for motorized watercraft | YES (40 mph) | NO | NO | YES (35 mph) | NO | NO | * | NA |

⁵Establish a 100-yard no-wake zone from shoreline, and a 300-yard no-wake zone adjacent to public use areas, the two historic districts, and habitat-sensitive areas.

⁶The Friends of Lake Crescent want no changes made to current water recreation policy, including the continued use of personal watercraft on Lake Crescent. However, since the National Park Service has determined that PWC use poses a threat to park resources and values and adversely affects the experience of other park visitors, particularly those seeking a resource-based experience dependent on a national park setting (see Appendix A), PWCs would be prohibited from Lake Crescent under each of the alternatives considered.

| PROGRAM ELEMENTS | | Alternative A (Proposed Action) | Alternative B (No Action) | Alternative C | Alternative D | Alternative E (FOLC Alternative) | Potential to Effect Resources | Known Resources Present ⁴ | Inventory Required |
|-------------------------|---|---------------------------------------|------------------------------|---------------|----------------|--|-------------------------------------|--|-----------------------|
| WATER RECREATION | | | | | | | | | |
| 5 | Establish horsepower (hp) limits for motorized watercraft | NO | NO | NO | YES (25 hp) | NO | NO | * | NA |
| 6 | Investigate the use of a citizens' auxiliary to assist Olympic National Park in patrolling the lake | YES | NO | NO | NO | YES | NO | * | NA |
| 7 | Change the fishing regulations to decrease the minimum fish length for young fishermen | NO | NO | NO | NO | YES | NO | * | NA |
| 8 | Consider establishing/constructing an auxiliary launch ramp at Wallace Point | NO | NO | NO | NO | YES | YES | * | archeological |

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GLOSSARY

anadromous fish - species of fish such as salmon, which hatch in freshwater, spend a large part of their lives in the ocean, and return to freshwater to reproduce.

angler - a person who fishes with a rod or reel.

Beardslee - a stock of rainbow trout which originated in the Elwha River system but established a resident life history form after it was isolated in Lake Crescent by a series of large landslides. Beardslee are endemic to Lake Crescent.

Crescenti - a unique and isolated stock of cutthroat trout endemic to Lake Crescent, which like the Beardslee trout, originated in the Elwha River system and was subsequently isolated in Lake Crescent by a series of landslides.

cultural landscape - a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with an historic event, activity or person, or exhibiting other cultural or aesthetic values.

cultural resource - An aspect of a cultural system that is valued by or significantly representative of a culture or that contains significant information about a culture. A cultural resource may be a tangible entity or a cultural practice.

cumulative effect or impact - "...The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.6).

disjunct populations - relatively small populations of animals or plants that are separated, often by hundreds of miles, from the main population.

ecosystem - interrelated communities of living organisms interacting with one another and with their physical environment, such as a forest, lake or rocky mountaintop.

EIS - Environmental Impact Statement. The National Environmental Policy Act of 1969 requires that an environmental impact statement be prepared to evaluate the potential environmental effects of major federal actions. An EIS identifies and analyzes activities that might affect the human and natural environment.

endangered species - Any species that is in danger of extinction throughout all or a significant portion of its range due to current or planned activity, usually in context of designation by the U.S. Fish and Wildlife Service under the Endangered Species Act of 1983, as amended.

endemic species - plants or animals naturally confined to a specific region and found only within a limited geographic area.

ethnographic resource - A site, structure, object, landscape or natural resource feature that has traditional legendary, religious, subsistence or other significance in the cultural system of a group traditionally associated with it.

historic setting and character - refers to the larger area or environment in which a historic property is located. It may be an urban, suburban, or rural neighborhood or a natural landscape in which buildings have been constructed. The relationship of buildings to each other, as well as setbacks, fence patterns, views, driveways and walkways, and street trees create the character of a district or neighborhood.

interpretive opportunities - this term implies that there are many different ways to help visitors better understand the natural and cultural history of Lake Crescent. The messages include everything from the prehistory and history of the development of the lake to lake ecology and otter biology. The methods of interpreting this information range from information kiosks and wayside exhibits to using park interpretive rangers to rove trails and present evening programs at lodges and campgrounds.

jet skis - see Personal Watercraft; PWC

Lake Crescent watershed - the area that drains into Lake Crescent, bounded by the ridges surrounding the lake.

Land Protection Plan - adopted in 1984, this plan identified all nonfederal ownerships within the park and briefly describes the critical resource concerns and possible incompatible activities that could pose threats to park values or risks to human health and safety. In accordance with Congressional directives, this plan further established priorities for acquisition of nonfederal tracts. In the absence of incompatible threats to resource values or imminent risks to human health and safety, acquisition will only be done when a willing seller, willing buyer situation exists. Park management will remain aware of proposed land use developments and changes to existing conditions in order to insure compliance with local, state and federal laws and regulations; to prevent loss of or damage to soil and vegetation; contamination of the lake by hazardous materials and sewage/waste; excessive water usage and run-off damages; adverse impacts to natural processes and sensitive plant and animal species; and possible conflicts with visitor services and public facilities.

landowner - a private owner of land; in the context of national parks this term is often used as a synonym for "inholder", an individual who holds title to privately-owned land located within the boundaries of a national park.

natural processes - processes that lack human intervention.

NEPA (National Environmental Policy Act) - A federal law passed in 1969 that requires the consideration of environmental effects of proposed federal actions.

occupancy rates - occupancy rates at concession-operated lodges are measured by counting "visitation" (the actual number of overnight guests), as well as "percent occupancy" (the number of occupied rooms compared to the number of rooms available for sale).

old growth; old-growth forest - a complex forest community characterized by the presence of large, old trees (200 years and older), a multi-layered canopy (trees of varied size, species and age), standing dead trees or "snags" and extensive amounts of large woody debris on the forest floor.

personal watercraft; PWC - a vessel usually less than 16 feet in length (measured from end to end, excluding sheer) which uses an inboard, internal combustion engine powering a water jet pump as its primary source of propulsion. The vessel is intended to be operated by a person or persons sitting, standing or kneeling on the vessel, rather than within the confines of the hull. PWC include vessels commonly referred to as jet ski, waverunner, wavejammer, wetjet, sea-doo, wet bike and surf jet. The Personal Watercraft Industry Association (PWIA), which consists of about five or six PWC manufacturers, coined the term "Personal Watercraft".

riparian - A distinct plant community found along shorelines, characterized by its adaptation to moist growing conditions and occasional flooding.

social trail - undesignated path that has formed due to repeated use by humans. Because these trails lack proper design and maintenance, their formation often leads to resource damage (e.g., vegetation trampling and removal, barren ground, altered drainage patterns, soil compaction and erosion).

spawning habitat - habitat which is suitable for fish to carry out their reproductive cycle, including laying and fertilizing of eggs and the development of eggs into young fish. Spawning habitat for salmonids generally consists of clean gravel through which water percolates due to streamflow or upwelling in lakeshore situations. There are many components that contribute to the formation of spawning habitat such as woody debris, gradual recruitment of gravel, moderate flows during the incubation period, and high water quality (especially high dissolved oxygen, moderate temperatures, and low levels of suspended sediment).

threatened species - any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

traditional cultural property - a property associated with cultural practices or beliefs of a living community that are rooted in that community's history or are important in maintaining its cultural identity. Traditional cultural properties are ethnographic resources eligible for listing in the National Register of Historic Places.

visitor experience - the overall experience of an individual visiting the park. While each visitor's perception of his or her experience will be unique, based on individual tastes, expectations, background and interests, general assessments of the quality of the visitor experience can be drawn from visitor comments at ranger stations and other park facilities, as well as letters written to the park. Other inferences may be made by observing the condition of park resources and facilities. Adequate parking and well-maintained trails are often seen as enhancements to many visitors' experience, while the opposite conditions would not.

wayside exhibit - an outdoor educational exhibit that interprets a specific site or event, typically located along a nature trail, roadside parking area or overlook.

LIST OF ACRONYMS

| | | |
|-------|---|--|
| CCC | - | Civilian Conservation Corps |
| CFR | - | Code of Federal Regulations |
| EIS | - | Environmental Impact Statement |
| EPA | - | Environmental Protection Agency |
| FOLC | - | Friends of Lake Crescent |
| GIS | - | Geographic Information System |
| GPRA | - | Government Performance and Results Act |
| hp | - | horsepower |
| ISTEA | - | Intermodal Surface Transportation Efficiency Act |
| LCLHD | - | Lake Crescent Lodge Historic District |
| mph | - | miles per hour |
| N/A | - | Not Available |
| NEPA | - | National Environmental Policy Act |
| NHPA | - | National Historic Preservation Act |
| NPS | - | National Park Service |
| ONP | - | Olympic National Park |
| OPI | - | Olympic Park Institute |
| PWC | - | Personal Watercraft |
| PWIA | - | Personal Watercraft Industry Association |
| RHD | - | Rosemary Inn Historic District |
| RV | - | Recreational Vehicle |
| SHPO | - | State Historic Preservation Office(r) |
| WNHP | - | Washington Natural Heritage Program |
| WSDOT | - | Washington State Department of Transportation |
| U.S. | - | United States |
| USC | - | United States Code |
| USFWS | - | U.S. Fish and Wildlife Service |
| VIP | - | Volunteer in Parks |

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